OCT 15

OCTOBER 12, 1940

Railway Age

Founded in 1856

Transportation Library

OCT 15 1940

TRANSPORTATION LIBRARY

Self SEALED

Nine CAST STEEL

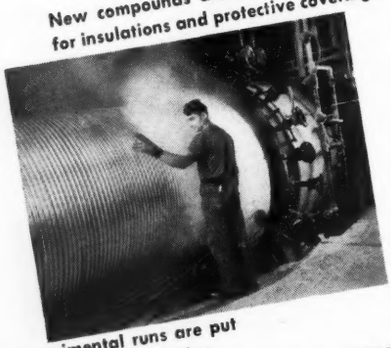
- MINIMUM CORROSION
- MAXIMUM STRENGTH
- NO LOSS OF LADING

HOPPER FRAMES

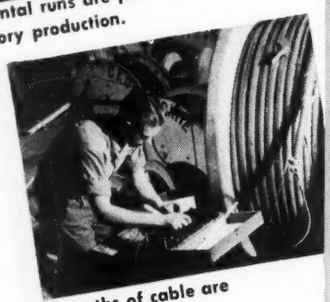
THE WINE RAILWAY APPLIANCE CO. • TOLEDO, OHIO

OKONITE RESEARCH

New compounds are being developed for insulations and protective coverings.

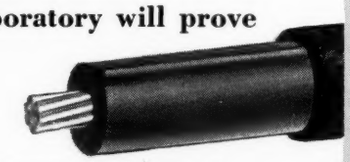


Experimental runs are put into factory production.



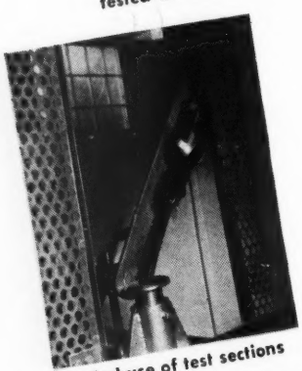
Entire lengths of cable are tested at every step.

Okonite research works many years in advance of the introduction of a new insulation. New products are constantly being tested for better cables, and new methods of manufacture are being developed. When Okonite announces a new product, such as Okonite-Okoprene for signal circuits (and other uses) many years have already been spent developing, testing, improving and actually operating these cables under field service conditions. No untried cable is *ever* offered for any service without utter certainty of its ability to deliver all and more than is claimed for it. A visit to our research laboratory will prove most interesting.



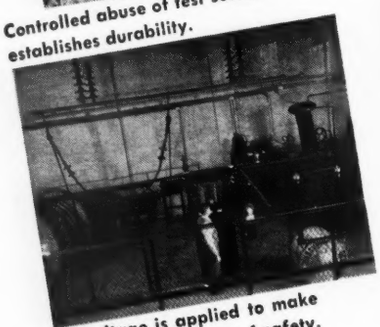
OKONITE

Insulated Wires and Cables

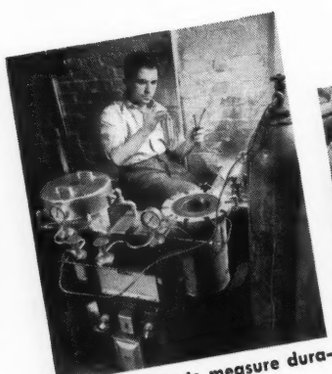


Controlled abuse of test sections establishes durability.

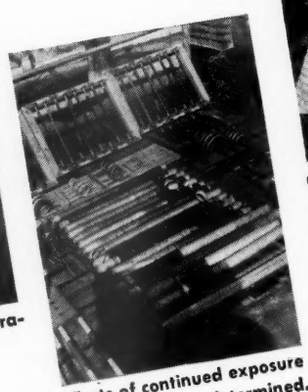
Cables are buried in soil, sand, and cinders for years, under full load, and periodically tested to determine the best for each condition.



Super-voltage is applied to make certain of a high factor of safety.



Pressure and heat tests measure durability under extremes of service.



The effects of continued exposure to weather must be determined.

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MINER

POWER HAND BRAKE

SAFE · FAST
POWERFUL
Most Efficient and Reliable of all Hand Brakes

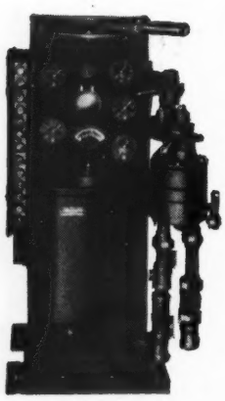
W. H. MINER, Inc.

CHICAGO

IF A RAILROAD PRESIDENT DID HIS OWN SWITCHING

He'd learn WHY Alco-G.E. diesel-electrics save so much time and money for his road

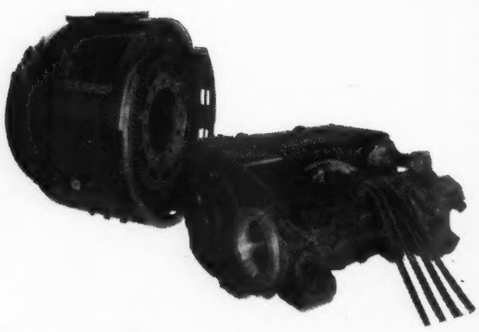
MUCH as they might like to, few railroad presidents could afford to spend a day in a locomotive cab. But, suppose one did take a shift on a new Alco-G.E. switcher . . . Although he might get a little dirt on his hands as he climbs aboard, he really doesn't need overalls. The cab is almost as clean, quiet, and comfortable as his office. It's not a bad spot for a president—the big windows and low, narrow hood let him see everything that's going on.



He gets a feeling of power the moment he pushes the button that starts Alco's reliable, railway-type, 4-cycle diesel engine. Listening to its smooth, steady purr, he compares this instant-starting to the time that's wasted getting up steam on steam switchers.

The remarkably fast, yet smooth, pickup surprises him a little when he opens the throttle. G-E electric drive has many important improvements which, at given engine speeds, produce very rapid acceleration and high average and top speeds.

And then he marvels at the ease with which his locomotive walks away with a long string of heavy cars. Of course, he knows that a diesel-electric has all of its



SWITCHING POWER THAT HAS EARNING POWER!

RAILWAY AGE

The Division of Voters According to Their Incomes

Fully as significant as what they indicate regarding the probable result of the national election is the evidence the Gallup polls afford regarding the extent to which the voters of the United States are dividing politically in accordance with their incomes. In these polls the lowest income group consists of persons having incomes less than $25 a week, including those on relief; the middle income group of persons receiving $25 to $50 a week; and the highest income group of persons receiving over $50 a week. The polls all indicate that an overwhelming majority of the lowest income group, and especially of reliefers, is for the New Deal candidate for a third term; that about equal numbers of the middle income group are thus far for Roosevelt and Willkie; and that an overwhelming majority of the highest income group are for Willkie. The polls forecast an election so close that it will be determined by the final decisions of the about 10 per cent of the electorate who have not yet decided how they will vote.

Income as a Measure of Intelligence and Ability

What does this division of the voters so largely along income lines mean? The important real issues of the campaign are economic. What, then, especially does this division of the voters indicate as to whether the supporters of Roosevelt or Willkie probably are more competent to form sound opinions regarding the issues and the candidates? Ask any man in just about the middle of the middle income group—with an income of, say, $35 a week—whether, in his opinion, most persons getting less income than he gets have more or less intelligence, industry and ability than he has, and almost invariably he will promptly reply, "less." Ask him whether, in his opinion, most persons getting more income than he gets have more or less intelligence, industry and ability than he has, and probably he will hesitate longer, but usually he will reply, "more."

In other words, it is usually easier to prevail on people to accept evidence indicating their superiority than evidence indicating their inferiority to others; but, nevertheless, almost everybody does concede in one way or another that, while the income a man makes is not sole or conclusive evidence of his intelligence, industry and ability, it is the best single indication of the amount of these qualities he has. Many men of unusual intelligence, industry and ability, especially young men, make less than $35 or even $25 a week; many without much intelligence, industry and ability make more than $35, or even $50, a week; but the incomes that most men derive from their work are consciously or unconsciously accepted by nine persons out of ten as the best single measure of their intelligence, industry and ability.

Preponderance of Intelligence and Property Versus Preponderance of Votes?

What these Gallup polls mean, then, according to the generally accepted standards, is that a large majority of persons having less than average intelligence, industry and ability are supporting Roosevelt, while a large majority of those having more than the average amount of these qualities are opposing him. Those having incomes larger than the average income also own a vast preponderance of the property of the country. It follows that in this campaign the possessors of much less than half the nation's intelligence, industry, ability and property are supporting one candidate and the possessors of much more than half its intelligence, industry, ability, homes, farms, life insurance policies, savings bank deposits, corporation securities and so on are supporting the opposing candidate.

We do not believe that ever before in the history of this country—not even in 1936—did the voters divide politically so largely in accordance with their incomes and property. Why, then, are they doing so now? Undoubtedly millions of them are being influenced principally by their partisan prejudices. Undoubtedly other millions are being influenced principally by what they believe will be best for the country; but when the voters divide so largely in accordance with their incomes it seems plain that most of them are being influenced principally by hopes and fears regarding the effects of the election on their own particular incomes.

Why Political Divisions on Income Lines?

And that undoubtedly is what is occurring. A great majority in the highest income group do fear and strongly believe that continuance of the New Deal's government spending and deficit policies and of its general economic policies would soon result in a national

disaster which would largely or completely wipe out their incomes and property. Voters in the middle group (with incomes of $25 to $50 a week) are thus far about equally divided, probably a very large majority of those receiving $37.50 to $50 a week being opposed to the New Deal because fearful of the effects of its continuance on their incomes and a very large majority of those receiving $25 to $37.50 being in favor of the New Deal because fearful of the effects of its defeat on their incomes. As to the lowest income group, receiving $25 a week or less and including all W. P. A. workers and persons on relief, unquestionably the reason why an overwhelming majority of its members favor Roosevelt for a third term is that they believe that during the last seven and one-half years their incomes have been even as large as they have been principally owing to his policies, and that his defeat probably would result in reduction of their incomes while his election for a third term might result in an increase of them.

Upon What Do Incomes Depend?

Well, then, upon what do the incomes of the members of each group principally depend? Probably a large majority of the lowest income group believe their incomes depend principally upon the way in which the nation's income is divided; that the way in which this division of income is made can and should be determined principally by government policies favoring the lowest income group; and that, therefore, in their selfish interest those in the lowest income group should vote to put and keep politicians in power who favor policies purportedly tending to increase the income of the lowest income group **at the expense of the middle and highest income groups,** especially the former. Of course if the view that these policies could and would accomplish the purpose stated could be sustained by facts this would afford a conclusive argument that in their selfish interest **the middle and highest income groups should vote unanimously against all candidates that members of the lowest income group in their selfish interest should vote for.**

But a large majority of members of the highest income group repudiate this view. They hold, on the contrary, that the total and average incomes of **all three income groups** depend upon the total amount of durable and consumption goods produced; that the incomes of all three income groups rise and fall together; and that, therefore, the selfish interest of all three groups is best promoted by such voluntary co-operation between capital, management and employees in each industry and all industries as will result in the maximum practicable production of goods. The members of the middle income group evidently are divided between these two views.

Who Is More Likely to Be Right?

The issues involved are, of course, economic. Which side, then, is more likely to be right about them—that on which is arrayed a vast majority of the intelligence, industry, thrift and ability of the nation, although, perhaps, a minority of its voters; or that on which is arrayed a decided minority of the intelligence, industry, thrift and ability of the nation, although, perhaps, a majority of its voters? Apparently only one answer can be made to this question—unless it is going to be contended that those making $35 a week **and upward** usually show more competency in all the other affairs of life, but that those making $35 **and downward** happen for some mysterious reason to be better qualified to pass intelligently on all the great issues involving the future welfare of this country, and perhaps of the world, on which the American electorate will vote on November 5.

It may be said that those opposing the New Deal candidate's re-election are influenced by what they believe to be in their selfish interest as well as by their superior intelligence. But, aren't the members of the lowest income group also influenced by what they believe to be in their selfish interest? Obviously the difference between the groups is not a difference of selfishness, but a difference of intelligence and ability.

This reference to selfish considerations brings to the front another question of vital importance. All the polls indicate that the national election next month will be the closest for a long time; that, in fact, in many states the difference between the votes cast for the candidates of the two parties may be only a small fraction of the total. But everybody knows that **one very important reason** why such a large preponderance of the lowest income group will vote for continuance of the New Deal is that the New Deal has—or will have—virtually or actually bought the votes of a large part of this income group with taxes collected principally from the highest and middle income groups. It follows that if Roosevelt wins by **only a small majority** every intelligent person will know that that majority was **bought.** Now, from the standpoint of democracy, not to mention morals, there is little difference between a vote secured by coercion and one secured by bribery. And it makes no difference, either, from the standpoint of either democracy or morals, whether votes are bought by vulgarly paying $1 a head for them or by the payment of a much larger amount of W. P. A. or relief money to which the recipients are not entitled.

Reading European History Would Help

How much "unity" does any sensible person believe there will be in this country if a very large majority of its intelligent, industrious, thrifty and capable people believe after the election that it was carried against them because just enough votes were bought—with money collected principally from those beaten? Perhaps nothing would do more good in this country than for several millions of its voters to read before the national election the political histories of Italy and Germany just before the Fascist and Nazi uprisings in those countries, and of France just preceding the pres-

ent war. They would find very much in them which strongly resembles what is now occurring in politics in the United States—and which helps to explain what subsequently occurred in Italy, Germany and France.

The average compensation of the one million railway employees of the United States in 1939 was $1,887, or more than $36 a week. A large majority of them, therefore, fall within the Gallup Institute's "middle income group" receiving from $25 to $50 a week, while many are in its highest income group receiving upward of $50 a week. It is usually assumed that an overwhelming majority of them will vote for Roosevelt. They may well ask themselves, if that is their present intention, whether this is because their labor union bosses are telling them to do it, or because, after careful consideration, they have decided **for themselves** that, in their own interest and that of the country, they should vote with the lowest income group rather than with the income groups to which most of them belong.

Rebuild the Bridge and Building Organization

The bridge and building department has become the step child of the maintenance of way department on many railroads. This condition has arisen in part because of the emphasis that has, of necessity, been placed on the track in these days of markedly increased speeds and the diversion, as a result, to the track department of allotments of funds that in more normal years would have gone for the upkeep of structures. It has resulted in part also from the knowledge that it is usually possible to defer work on structures longer than on track without courting disaster. There comes a time, however, when the deterioration becomes so marked as to endanger the investment in a structure, if not safety of travel. On not a few roads it is now being found that this day of reckoning has arrived.

The railways have a large investment in their

A Clearer National Policy for Transportation

The Transportation Act of 1940 declares that it is now the policy of Congress to provide fair and impartial regulation of transportation agencies so as to recognize and preserve the inherent advantages of each—railroads, trucks and waterways.

It provides further that in prescribing just and reasonable rates *for a particular form of transportation,* due consideration shall be given to the need of adequate and efficient transportation service at the lowest cost consistent with the furnishing of such service *by that particular form of transportation;* and that the rates *of a particular form of transportation* shall not be held to discriminate against, prejudice or disadvantage the traffic *of any other carrier of whatever description.*

Isn't this, in the final analysis, a mandate requiring that the rate structure and other conditions obtaining on one form of transportation shall not be considered in determining the rates by any other form of transportation? What are "inherent advantages" if they are not the economy *inhering* in each form of transportation? What is economy if it is not the cost of producing the service?

Haven't the authors of this legislation defined "inherent advantages" to mean that freight rates, where any question of rivalry between different methods of transportation arises, shall be based upon the cost and other conditions obtaining in the branch of the industry for which the rates are intended to apply? How may the Commission determine the "inherent advantages" of a particular form of transportation unless it knows what it costs that form of transportation to produce the service and how else may it recognize and preserve the "inherent advantages" of each form of transportation unless it employs such costs in determining the rates to be charged? Certainly no thoughtful student of the problem would contend that that elusive consideration called "service advantage or disadvantage" should alone be used as a measure of the "inherent advantages" of each form of transportation.

Many of the carriers by each form object to cost as a criterion in determining rates when different forms of transportation come into conflict. For carriers in a position to "pick and choose" their traffic, perhaps opposition to cost as a competitive rate determinant is based on true self-interest (short-run though). Truck and water carriers enjoy this "pick and choose" prerogative. But the railroads do not.

The new law provides that any power delegated by the Commission to any division or individual relating to rates, fares, or charges, shall be assigned according to the character of regulation and not according to the kind, class, or mode of transportation; and that any such decision is subject to review by an appellate division to be created thereunder. Upon such appeal the effective date of the order is automatically postponed pending its final determination.

While this practice may have been the customary one in the Commission prior to the enactment of this new law, it has not been adhered to rigidly enough to save the Commission from embarrassing conflicts in its decisions. This statutory declaration now emphasizes the necessity for a co-ordinating influence over the individuals making up the Commission and its staff before any of their actions become the final order of the Commission.

This new statutory outline of procedure, if taken as seriously by all interested parties as it should be, will go far toward preventing further criticism of the Commission because of the anomalies that have been created by conflicting decisions covering the same subject matter, by different divisions of the Commission.

It should also go far towards bringing about proper co-ordination and economic division of traffic among the several agencies of transportation.

bridges; their investment in buildings is equally large. Prudent management requires that this investment be conserved by adequate maintenance. In large measure deterioration of these structures results from corrosion and decay, induced by the elements and accentuated at times by brine drip and similar agencies. If neglected this deterioration progresses at an accelerated rate. If neglected long enough the time comes when members, if not entire structures, must be replaced.

It is doubtful if there has ever been a time, certainly not within the experience of the present generation, when railway bridges and buildings alike have been neglected so universally and so long. On not a few roads the situation has become so acute as to warrant the consideration of the managements, looking to the allocation of increased funds sufficient to arrest at least the most advanced deterioration. The railways have too much at stake in both safety of operation and investment in structures to warrant placing these structures in jeopardy.

Equally as serious as the deterioration of the structures has been the all-too-drastic curtailment of supervisory bridge and building maintenance forces. As the depression developed most roads extended the territories of their roadmasters and supervisors. In practically no instances, however, did they abolish these positions. But on not a few roads the position of division bridge and building supervisor was abolished, and the responsibility turned over to an already overloaded division engineer, frequently without any specific experience in bridge and building maintenance. It is a tribute to the loyalty of men so overloaded and so demoted that the structures have continued to function to date as well as they have.

Yet these structures are today in a weakened condition; as a result, they require more detailed and intelligent inspection. Furthermore, the day is at hand when more replacement, repair and painting must be done. If this work is to be done with the maximum efficiency and the limited money available devoted to the work that is most urgent, adequate supervision must be provided. The time has come when those railways which have curtailed their bridge and building supervision severely should restore it—as a means of promoting economy and seeing that the continued deferment of expenditures shall not create a hazard.

Something Worth the Thought of the American Workingman

"In January 1933 Adolf Hitler was appointed by President Hindenburg as Chancellor of the German Reich. In the course of a few months he acquired complete control of the machinery of government. In the ensuing seven years the control of government was extended to every phase of economic life. This development was dictated by the apparent requirements of a vast mobilization program, but it was also an expression of the underlying philosophy of National Socialism.

"The position of the workers has been transformed from that of substantial independence to a subservience more complete than that which existed under the feudal system of the Middle Ages. Apparently all of the successive steps leading to the present regimentation of labor had not been planned in advance; it was rather a gradual development—one step leading almost inevitably to another. The purpose of this analysis is twofold: to follow up that development through the maze of laws, decrees, regulations, and administrative practices; and to set it forth in the light of concepts which we had believed had been forever buried in the tombs of history.

"Inasmuch as Chancellor Hitler could not have seized power without the existence of a vast number of unemployed, it was obviously essential that he give his first attention to the provision of jobs. He tackled this task from two ends—a reduction of the number of workers seeking employment in the labor market, and an increase in the number of jobs.

"Several devices were employed for reducing the labor supply, only the more important of which need be mentioned. The first was to transfer men to the fighting services. From the very beginning of the Nazi regime young men were urged to join the military establishments; and in March 1935 military service was made compulsory by statute.

"A second step was the establishment of a compulsory labor service. The Weimar republic had already set up a labor service, though on a voluntary basis only. Hitler at once utilized this instrument as a means of getting people off the unemployment payrolls. Tens of thousands of young men were sent to camps to dry marshes, clear forests, improve roads, etc. They lived under military discipline and semi-military conditions; that is, they received shelter and food, but no remuneration beyond some pocket money. The act of June 26, 1935 on labor service (and subsequent regulations) only gave legal expression to an established situation when it decreed that every German between 18 and 25 was to serve for six months in the labor force without, by so serving, becoming an employee within the meaning of social legislation. For women, service was made compulsory only at the beginning of the war.

"A third device was to reduce the number of women in industry. Hitler's popularity with women was largely due to his promising them husbands and happy homes. This pledge—or, as will be seen below, the first part of it—he kept. As early as June 1, 1933 he passed an act making marriage loans available to young couples. No interest was to be paid and the terms of amortization were to be very convenient; however, no loan was to be granted unless the wife-to-be gave up such employment as she had and promised to refuse further employment. The scheme proved a considerable success. Moreover, the great extension of the Nazi party machine, gradually permeating every branch of national life, contributed toward reducing the number of persons available on the labor market.

"Parallel to thus decreasing unemployment, Hitler created employment through a generous public works policy. Public works have from the outset been chiefly devoted to preparing the country directly and indirectly for war. Thus, thousands of miles of first-class motor highways were built for through traffic, greatly in advance of actual motor traffic and regardless of a much more pressing civilian need for the improvement of existing country roads. Aerodromes were laid out to an extent that only now can be estimated; and a very great number of constructions of every possible kind—offices, barracks, training camps, fortifications, factories, etc.— were undertaken for, or on behalf of, the Nazi party and the fighting services, as well as in preparation for the contemplated manufacture of arms and ammunition. . . ."

From a Pamphlet "How Nazi Germany Has Mobilized and Controlled Labor" by L. Hamburger, Published by the Brookings Institution, Washington, D. C.

The New Alco G. E. 660-Hp. Diesel-Electric Switcher

New Alco-G. E. Switchers Have Improved Visibility

Simplification of drives for auxiliaries and lower hood are recent improvements on 660- and 1,000-hp. types

FOR some time the American Locomotive Company has been making deliveries on 660-hp. and 1,000-hp. switchers of a design in which the visibility has been greatly increased and general appearance improved. Several changes have also been made resulting in simplification of the operation of auxiliaries. The lower engine hood has been made possible by dropping the Diesel engine down into the locomotive underframe. The power plant and auxiliaries are located under the hood with the engine at the center and the radiator at the front. Part of the hood is removable and ventilation is obtained by louvres in hatch doors. In the case of the 1,000-hp. turbo-charged engine air is drawn in through a filter mounted on the hood. On the 660-hp. engine the filter is on the engine.

The locomotives are rated 660 and 1,000 hp., respectively. All electrical equipment is furnished by the General Electric Company. Except for the main generators, it is identical on both locomotives. In previous designs, the auxiliary generator was mounted on the main generator shaft. In these, all auxiliaries, except the air compressors, are driven by V-belts from sheaves on the main shaft. Formerly the air compressor was motor-driven by power from the auxiliary generator and in the new locomotives, it is on the main shaft. These changes permit the use of a smaller auxiliary generator and exciter and allow the engines to idle at 250 r.p.m., thereby saving approximately one gallon of fuel oil per hour. The compressor output is 76 cu. ft. per min. at idling speed and 228 cu. ft. per min. at full speed (740 r. p. m.).

Traction motors have large thermal capacity, those on the 660-hp. unit being rated at 740 amp. and those on the 1,000-hp. unit, 830 amp. The increased rating on the larger locomotive is obtained by increasing the volume of the cooling air; 750 cu. ft. per. min. on the smaller and 1,200 cu. ft. per min. on the larger one. Maximum speed restriction is 60 m. p. h.

General Features

The general structure of these locomotives consists of a welded steel underframe on cast-steel swivel trucks, a narrow low hood and an operator's cab at one end. The engine, radiator compartment, generator, auxiliary generator, air compressor and contactors are all located under the hood, the engine being in the center section with the radiator compartment at the front.

The windows in the cab are exceptionally large and there is a very narrow section between the windows. Visibility is further improved by an elevated operator's seat. The cab is heated by an automotive type of water heater.

The 660- and 1,000-hp. Diesel engines are alike except for the addition of a turbo-charger in the latter type.

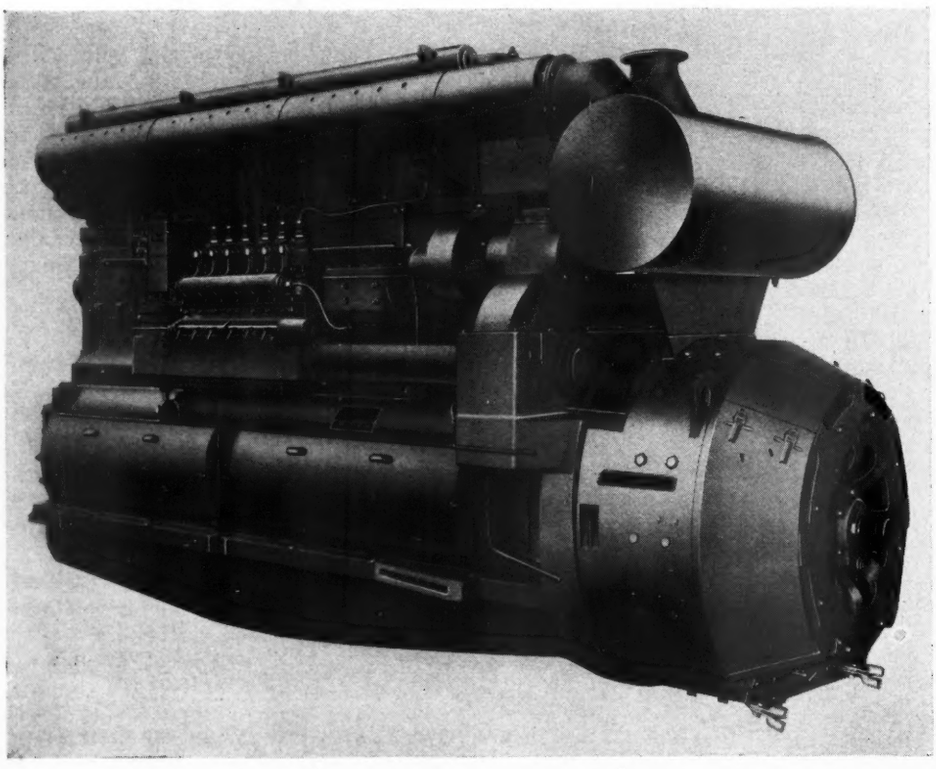
The Lower Engine Mounting and Lower Hood Improves the Visibility

The increased amount of air supplied by the turbo-charger permits more fuel to be burned per stroke and acts as dilutent, with the result that the full load exhaust temperature of the turbo-charged (Buchi system) 1,000-hp. engine is only 800 deg. F., while that of the 660-hp. engine is 895 deg. F.

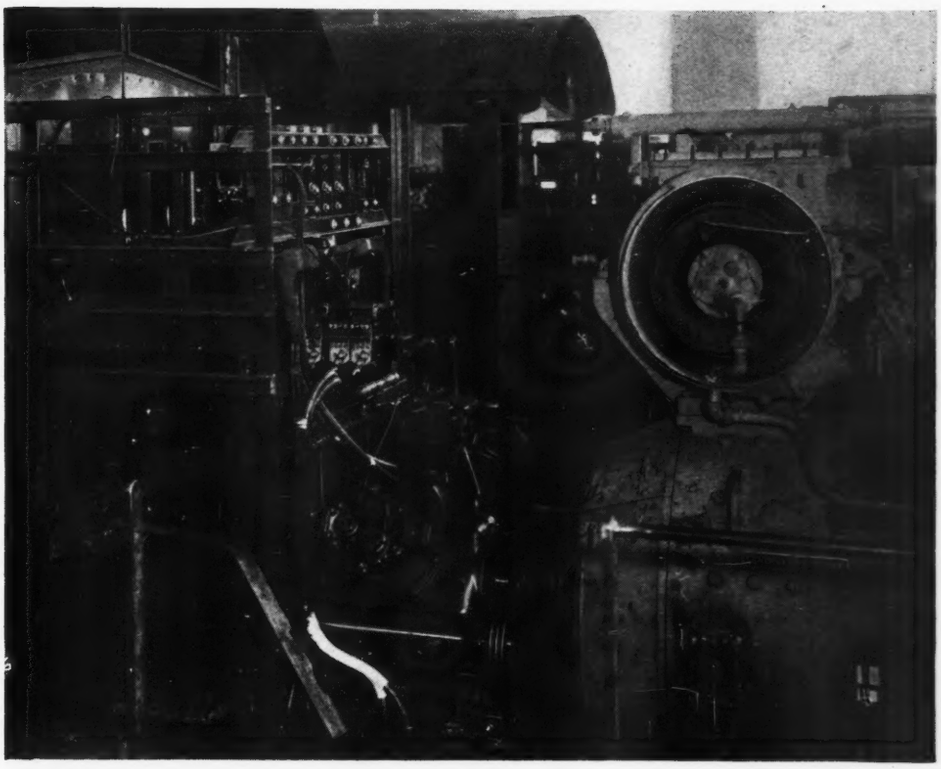
The water and oil-cooling radiators are of the sectional core type. The radiator fans are V-belt driven from the engine and shutters are applied outside of the radiators and are operated by a control in the cab. To maintain a nearly constant load on the radiator fan, by-pass shutters are located inside the radiator compartment. They are so arranged that a corresponding graduated movement of the by-pass shutters occurs automatically with a movement of the outside shutters. When the outside shutters are closed, the by-pass shutters are open, and vice versa. This allows complete control of the degree of cooling desired.

Electrical Equipment

The electrical equipment is built entirely by the General Electric Company. It includes the main traction generator, a belt-driven exciter auxiliary generator, 4



One of the Alco 660-Hp. Diesel Engines, With General Electric Generator



Electrical Equipment and Compressor, Located Between the Cab and the Engine Generator—A Portion of the Turbo-Charger Is Shown on Top of the Generator

GE-731 series traction motors and complete Type P control equipment.

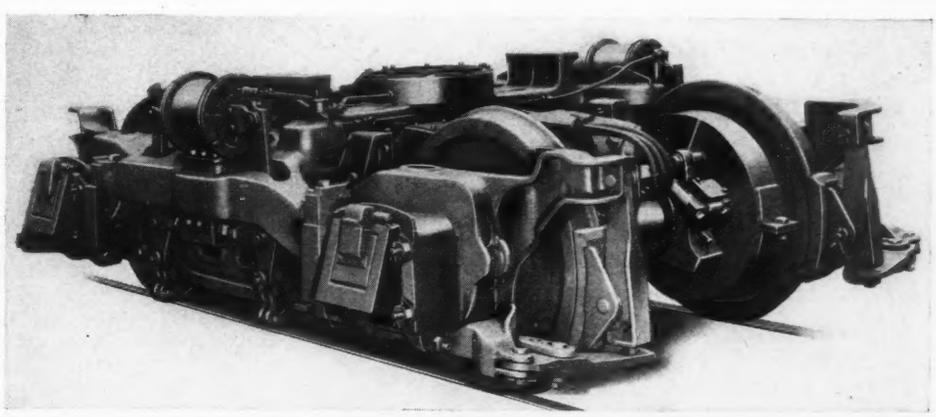
The main generator is supported by the engine frame and two spring-loaded feet attached to the generator frame. This construction insures alinement between the engine and the generator armature. A single self-alining roller bearing is used at the outboard end of the armature shaft. The auxiliary set consists of a split-pole exciter which furnishes excitation to the main generator and an auxiliary generator which supplies power for the control circuits, the electrically-operated auxiliaries and for charging a 32-cell battery. The armatures of the two machines are on the same shaft. The main generator furnished power for the four direct current commutating pole traction motors which are permanently connected two in series for series and series parallel operation. These motors are supported in the locomotive truck by sleeve type axle bearings and spring nose suspension from the truck frame. The motor armature bearings are the roller type. The armature shaft has ample rigidity and is so installed that it can be removed without disturbing the windings or commutator. The motor frame is an integral steel casting and has large openings for inspecting brushes.

The Type P single-end, single-unit control functions with a minimum of attention from the engine operator. Power supplied by the engine is applied by means of a throttle lever on the control stand at the engineer's position. The initial movement of this throttle closes contacts which operate the main circuit and field contactors. The traction-motor reverser and line contactors are pneumatically operated and the remaining contactors magnetically operated.

The traction motors are arranged to operate in series and series-parallel and there are also connections for shunted-field operation. The motor connections are changed automatically from series to series-parallel and from series-parallel full-field to shunt-field operation.

Automatic transfers are provided not only at rated engine speed but over the entire operating range of the engine. The relay which effects this automatic control materially increases the engine utilization during partial control and as a result more rapid acceleration and

(*Continued on page 511*)



The Trucks Are Equipped with Clasp Brakes and Are Reversible Under the Locomotive to Equalize Tire Wear

Scrap Handling and Reclamation Practices Aired

Santa Fe and Southern Pacific methods described before Pacific Railway Club

THE Atchison, Topeka & Santa Fe has reversed the long established policy in scrap handling and reclamation that gave its system scrap handling and reclamation plant at Corwith, Ill., the distinction of being one of the pioneer enterprises of its kind in the country and now follows the practice of sorting scrap where it originates and utilizing the nearest shops for the repair of material recovered from it. By contrast, the Southern Pacific still favors the centralized method for meeting its problems of scrap handling and reclamation. This is the gist of two papers which were presented at a meeting of the Pacific Railway Club in Los Angeles, Calif., on September 13 during which methods employed on the Southern Pacific for getting the most out of reclamation were explained in detail. The papers were in part as follows:

Santa Fe Changes

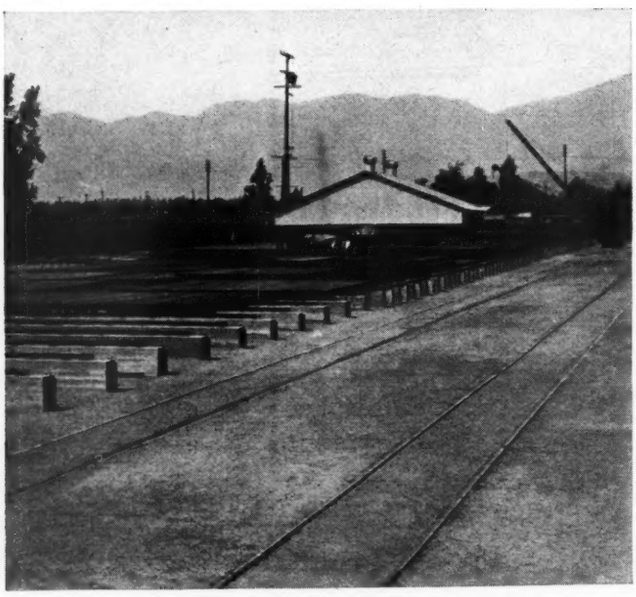
By Peter Young*

Approximately 30 years ago the Santa Fe began sorting its scrap at Corwith, Ill., because the location had the advantage of being in the best scrap market, which was then Chicago. Upon sorting scrap to various specifications, it was found that there were many items of car and other materials that could be re-used without repairs. These were returned to the line and re-used. In addition to this, other material was picked out that could be reclaimed for very little money. This suggested a reclamation plant on a small scale. The first building was an old box car where one blacksmith and a helper were employed to straighten out small items that were bent or twisted in service. Then came other forgings and rods that could be re-worked into other articles for re-use. The demand for this material increased to such an extent that it became necessary to erect buildings and install machinery, most of which was built from scrap and later replaced with new equipment in order to put reclamation on a productive basis. This plant was visited by representatives of many other railroads who later started reclamation plants of this nature.

General conditions brought about by the world war, when the plant was called upon to furnish material to other roads resulted in further expansion of the plant, and following this period, the railroad's construction programs and general business conditions sustained the demand on the plant's capacity until 1929. This was the turning point that centralized reclamation on our railroad.

The demand for material began to decrease with the curtailment of repairs to equipment and large track laying programs. Forces were gradually reduced and local points on the line began picking out of scrap the material that could be repaired and used locally to keep down costs. In 1933 the railroad had also developed scrap markets at several other points on the system which started scrap sorting locally to take advantage of these markets and reduce the long hauls to Chicago so that today all scrap is being sorted at the point of origin and supply cars pick up scrap and send it to nearest sorting point. Added to this was the change in car construction which had a tendency to cut down the demands for old material which was fast becoming obsolete.

* Supervisor of Reclamation, A. T. & S. F., Topeka, Kans.



Rail Sawing and Straightening Facilities on the Santa Fe at San Bernardino, California

Sort Scrap Locally

Under the new system of local scrap sorting the serviceable and reclaimable material is picked out before it is sent to a scrap yard. Trailer trucks of 1½ to 2½ tons capacity are placed throughout the roundhouses, shops and car yards, and the store department picks up these trailers after they are loaded with scrap and hauls them to the local scrap sorting yard. One or more trained scrap men are stationed at such points and as they unload the trailers they sort the scrap direct to specification, moving the trailers to each classified pile. Pieces that do not conform to specification and have to be cut or separated are prepared at that point by shears or torch. Scrap from dismantled cars is also prepared to classification at the point of dismantling and loaded in carload lots for direct sale.

This system has reduced the long haul, extra switching, unloading, sorting and reloading. Every effort is made to pick out reclaimable material before it reaches the scrap pile but any material that may get into the scrap is picked out when the scrap is sorted from the trailers. Most of this is reclaimed locally and re-used or sent to the nearest large shop point. Track tools and

brake beams are also handled in this manner, and all reclaim work for the mechanical department is performed by it under its supervision. The stores and mechanical departments work in close harmony to determine what material should be saved as both departments are familiar with the changes in standards, thereby reducing the chance of reclaiming a large stock of material that may later become obsolete.

Southern Pacific Methods

By E. J. Becker*

To bring the best results, reclamation should be centralized, as it permits quantity production, controlled and reduced costs and proper stock control. Reclamation from a stock or investment standpoint should be viewed as an outside industry and orders placed according to stock demands; however, consideration must be given to quantity production costs. The answer to the reclaiming of the second hand material is not to be found in the comparative reclaiming and new costs alone, but in the comparative service life as well. Specifications showing wear limits on recovered material must be furnished by the mechanical department with changes in policy, and specifications of reclaimed material must also be furnished.

Reclamation Must Save

It is not sufficient that a saving be shown on reclamation as a whole; a saving should be shown on every item reclaimed. If new material can be purchsaed at no added cost, it should be done. It is not difficult to make comparisons of costs between reclaiming an item and buying new material. The task is to continue to make them as conditions change. At the outset earnest effort was required to overcome the prejudices of the using departments against the use of second hand, reclaimed, or reconditioned material, but today all departments cooperate to obtain the maximum results from reclamation.

Couplers

In welding frogs, switch points, couplers, car castings, car forgings, brake beams, and air brake material the Southern Pacific follows line production and standard time methods, i. e., the work is divided instead of performing it as one complex operation. With couplers, the consecutive operations are inspection, including the marking of all defects and work necessary, building up shanks, reconditioning butts, reconditioning pin holes, welding cracked walls, conditioning knuckle pin holes, grinding built-up shanks, straightening and annealing. The work is laid out in advance of the welders and a complete set-up is made for the welders to eliminate loss of time in performing work and to maintain a standard output and costs. By time studies, standards of performance and output have been set which have resulted in a uniform product and uniform cost. Building of shanks is accomplished with the electric arc and swing grinder and the other operations with oxy-acetylene. All operations are in accordance with A. A. R. requirements.

Railbound frogs are first inspected for deep cracks or fissures, which would cause their rejection for reclamation. The frog is then prepared by grinding away fatigued material. In some cases, shattered material is removed by the oxy-acetylene torch if this does not require going too deep into the metal, after which all oxidized material is removed by grinding. The skip method

* Assistant General Storekeeper, Southern Pacific, Sacramento, Calif.

Storekeeping on the Southern Pacific at Sacramento, California

of welding is employed to prevent overheating and warp. Not more than one welding rod is used at any one "spot" at one time and the deposited metal is thoroughly opened during the welding process. After the metal is properly built up, a swing grinder is used to finish the surface and the manganese casting is then annealed. The casting is then rerailed with new rail or acceptable second-hand rail and otherwise thoroughly reconditioned by replacing worn parts.

Babbitt

The oxidized metal skimmed from babbitt used in babbitting journal bearings, crosshead shoes, and driving boxes, or skimmed from babbitt pots in melting babbitt from scrap journal bearings was previously sold as babbitt dross. This babbitt is now reclaimed. A reverberatory inclined hearth type furnace is used with an atmosphere flame reduced to a temperature of 750 deg. F. This dross contains portions of brass obtained from the recovery of the babbitt from brass castings, and if the heat exceeds 750 deg. the brass will go in solution and ruin the babbitt. The furnace is charged with 2,800 lb. of dross and this is mixed with 25 lb. of flux, consisting of 50 per cent soda ash and 50 per cent borax, which is spread evenly over the hearth of the furnace. This is then covered with half of a sack of charcoal. By operating the furnace at a reduced temperature, oxygen is excluded except that required for the combustion. The purified metal flows down the inclined hearth towards the tap which is closed during the process and the oxidized metal, charcoal, etc., floats, protecting the recovered metal and further releasing additional purified metal. After the draw off into the babbitt kettle, the metal is further purified by using sal ammoniac and ammonium chloride. This produces 1,700 lb. of refined babbitt per operation, which is a large saving, considering the price of tin and lead.

Journal Box Packing

Journal box lubrication is now prepared in a plant equipped with oil and waste machines, a power waste picker and a tumbler and with a saturation vat with baskets which are raised and lowered with a power hoist. The waste to be reclaimed is placed in the baskets when received at the plant. The oil and waste machines are equipped with steam heating jets which thoroughly heat the waste in the baskets and after the heating process

has been completed turbine jets are turned on while the heating jet is still operating, so that the waste is bombarded with steam while the oil and dirt are being removed by centrifugal force. When the oil has been removed, the steam heating jets are turned off and the operation continued to remove moisture.

The baskets are then lifted out of the machines with a power hoist and moved to a scale, for the purpose of checking the efficiency of the operation. The baskets are then moved to a power picker where the waste is loosened and pulled apart. During this process additional dirt is removed by a motor-operated blower. The waste is then placed in a tumbler and operated for a short time, where additional short strands and dirt are removed. From the tumbler the waste is moved to a carding table where experienced carders go over every pound of waste for short and worn strands.

The waste is again weighed and placed in baskets which are submersed into the saturation tank according to a time schedule and then drained. These baskets have drops ends that serve as chutes in loading barrels for shipment. Each barrel of waste packed is weighed. The check weights are made daily and samples are tested in the laboratory for compliance with A. A. R. Specifications.

Journal Box Oil

The journal box oil released in journal box packing flows by gravity from the oil and waste-saving machines direct to a tank. This oil is pumped to a storage tank where it is permitted to settle and oil to be reclaimed is removed from the storage tank at a point above the bottom. It is then mixed with silicate of soda and agitated for two hours at a temperature of 180 deg. At the same time an insulated settling tank is partially filled with water and heated to 180 deg. After the oil and soda are thoroughly mixed, the mixture is then pumped to the settling tank containing the heated water where it is agitated for 30 minutes, after which all heat is shut off and the mixture is permitted to settle for a period of four days. The clean oil then comes to the top and is tested in the laboratory.

Journal Box Grease

When the driving journal grease is removed from locomotive cellars the cake is trimmed to remove charred sections and is then forwarded to the reclamation plant. This plant consists of five pots constructed of open hearth steel which are suspended in a bath of valve oil to insure uniform heat on all the surfaces and eliminate charring during the reclamation process. The oil is heated by burning the short strands of waste discarded from the reclamation of journal box packing. Each of the five pots holds 200 lb. of grease. The grease in the pots is gradually brought to a melting stage, maintained in liquid state and agitated, permitting the impurities to settle below the draw-off pipe. The grease is then drawn off into cooling pans which are jacketed to permit water cooling of the grease, and when this grease has been cooled to 120 deg. it is placed in a grease press and passed through a mold containing 80 openings, producing ½ in. sticks of grease which continue through a second mold, reforming the grease to a cake. By pressing the grease through ½ in. holes and returning it to cake form, the grease receives two workings which correct the physical properties to comply with specifications. The reclamation of journal box packing, journal box oil, journal box grease, and wiping rags nets the Southern Pacific $140,688 saving each year.

Each brake beam is given a deflection load test and one beam from every 500 is subjected to a set load test. Worn serviceable brake beam heads are built up with oxy-acetylene and Tobin bronze. The key bolt hole in brake beam struts is welded solid by the electric process and drilled to proper size. Brake beam tension rods, when found to have the proper dimensions and when within the A. A. R. limits of wear, are reconditioned by chasing the threads. Compression members, when found to have the proper dimensions and conforming to A. A. R. standards, are heated, straightened and annealed.

Air Brake Material

Line production methods are also followed in the conditioning of air brake material by segregating the stripping, inspection, conditioning, assembly, testing, and painting. Triple valves are stripped on a special machine consisting of a power wrench arrangement with accessories available for the easy and quick segregation of the parts. All parts are then checked with A. A. R. gages and cleaned. Special machines are used to resurface the seats and condition the parts, as well as to assemble the parts. All of these operations may be considered as ordinary repairs; however, reclamation occurs when it is necessary to dispose of parts not complying with A. A. R. gages. When the seat of an emergency valve brass seat is too thin it is reclaimed by cleaning, building up with solder and turning in a lathe to original size. When the emergency piston guide or valve seat for the K-2 triple valve becomes oversize it can be converted to a P-2 seat by reboring, while the emergency valve seat is built up with Tobin Bronze and turned in a lathe. Cracks in cast iron locomotive cylinders, are brazed and in steel cylinders, are welded. In the preparation of cast iron cylinders, the cylinder is preheated to 500 deg. and the cracks are mended with bronze and oxy-acetylene, after which the cylinders are again heated and permitted to cool with the fire. The same process is followed with air pumps, feed water pumps, feed water heaters, mechanical lubricators and injectors.

Rail anti creepers are placed in a furnace and annealed to remove the temper, then reset in an air operating machine and retempered. Coupler knuckles are thoroughly annealed. Knuckle pin holes are closed and the locking face of the knuckle is built up by plates or by the electric process. Worn guides in the Barber lateral motion device seat are built up by the electric process, annealed and machined to size.

Track Shovels

Track shovels which are still acceptable for the purpose for which they were originally purchased, are rehandled. When they are beyond use as track shovels they are converted to caboose coal shovels by heating and forming to the proper shape in an air-powered die. Broken and missing tines of ballast forks are replaced by the oxy-acetylene process, using a nickel steel welding rod and properly annealing the fork.

The reclamation of switch points is performed by the electric arc method. The parts to be welded are ground until the parent metal is exposed. The point is then built up by the electric arc, after which it is ground to proper dimensions. Straps and transit clips are replaced if necessary and the points completely reconditioned.

When the center oil retaining ring of a truck center plate is broken, the remainder of the ring is cut out by use of oxy-acetylene, the center of the casting is placed in proper condition for welding and weldless steel tubing is cut to proper length and welded to the casting to replace the oil retaining ring. The rivet holes are then repaired and the center plates annealed. Superheater tubes

are conditioned by sawing off the return bend caps, after which the tubes are thoroughly sandblasted and the caps welded back by the use of oxy-acetylene method. The tubes are then straightened and conditioned with supports and bends.

Track Spikes

Track spikes obtained from the line of road are sorted to size and the reclaimable spikes are heated and straightened, placed in a rattler to remove all scale, inspected and graded as yard, branch or main line use, and packaged for shipment. Threads for track bolts are cleaned with a motor-driven wire brush, thoroughly oiled and fitted with nuts.

Locomotive crosshead guides and holes are welded by the electric process. Cracks in driving box saddle seats and wedge ways are welded by the electric process. Trailer box wedge ways are built up by the electric process and cracks and holes and checks repaired. Saddles are built up to the proper height with mild steel by the electric process. Wheel centers are built up to size electrically, using a heavy rod and turning to size. Floating blocks are built up by bronze. Aluminum cellars are repaired with oxy-acetylene, using aluminum-coated electric rods.

Materials which would still be scrapped if reclamation had not stepped in and shown the way to make use of these items include steam gaskets, feedwater heater steam turbines, lanterns, marker lamps, oilers, etc., guides, steam pipes, springs, spikes, rail anti creepers, track bolts, couplers, knuckles, car material, lining metal, brake beams, superheater units, engine frames, frame crossties, draw bars, switch points, taper rails, guard rails, frogs, gage plates, slide plates, tie bars, tie clamp bars, switch rods, switch stands, derails, filler blocks, metal foot guards, track jacks, track gages, track liners, track drills, nutlocks, high star switch stands, creepers, rail tongs, picks, mauls, sledges, chisels, lining bars, claw bars, wrenches, coil springs, leaf springs.

Reclamation is responsible for improvements of design, the studies to reclaim material not only having developed new practices, but having pointed the way to the correction of inherent defects in the articles being reclaimed. Many items which were manufactured in cast iron have been re-designed to use malleable iron and steel castings and finally to drop forgings.

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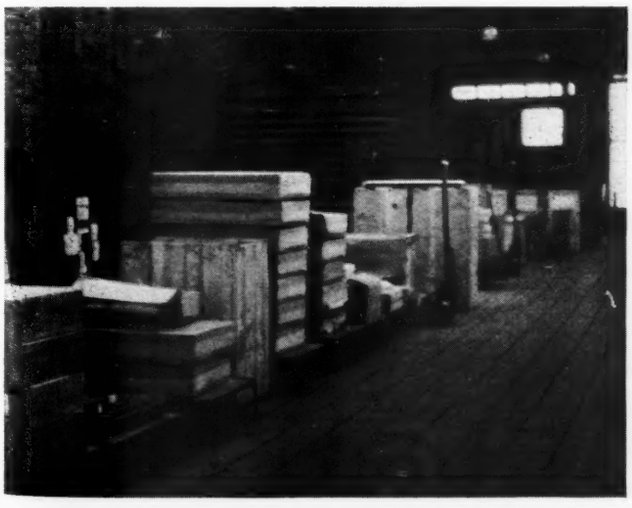


Portable Container Methods of Handling Stationery on the New York Central

New Alco-G. E. Switchers

(*Continued from page 507*)

higher average and top locomotive speeds are obtained when operated at reduced engine speeds. A current rely and indicating light give visible warning when the locomotive is operating below the proper speed range with the motors in the series-parallel connection. A wheel slipping relay with a buzzer also operates to warn the engineer when any pair of wheels slips.

The master controller is used to select the motor combination and the direction of movement of the locomotive. This controller has three forward, one off and three reverse positions. When the handle is placed in the third operating position before opening the throttle, the motor connections will then be changed automatically from series to series-parallel and field-shunting without attention on the part of the operator. If desired, the handle can be placed in the first forward or first reverse position so that it will maintain series connections of the motors. A multi-button switch at the operating stations gives the engineer control of the fuel pump, engine starting and the several lighting circuits.

Principal Weights and Dimensions of Alco Diesel-Electric Switching Locomotives

	660 hp.	1,000 hp.
Length overall, ft.-in.	44- 5¾	45- 5¾
Width overall, ft.-in.	10- 0	10- 0
Height from rail, (max.) ft.-in.	14- 4	14- 6
Wheel base, rigid, ft.-in.	8- 0	8- 0
Wheel base, total, ft.-in.	30- 0	30- 6
Truck wheels, diameter, in.	40	40
Total weight locomotive, lb.	199,000	230,000
Weight on drivers, lb.	199,000	230,000
Starting tractive force, lb.	59,700	69,000
Maximum speed, m.p.h.	60	60
Minimum radius curvature, locomotive along ft.	50	50

The trucks are interchangeable and reversible, to equalize flange wear. The only difference between the trucks on the two locomotives is that heavier springs are used on the 1,000-hp. unit which is about 30,000 lb. heavier than the 660-hp. design. Clasp brakes are applied with a large bearing area and those on one truck may be hand-operated. The gear ratios on both locomotives are $^{16}/_{75}$ and the wheel diameters are 40 in. The maximum tractive force is 29,200 lb. for the 660-hp. locomotive and 34,000 lb. for the 1,000-hp. unit.

The Westinghouse air compressor is driven directly from the main shaft. It is a two-stage, air-cooled compressor with a capacity of 228 cu. ft. per min. at 740 r. p. m. The air brakes are Type 14-EL.

THE "FLYING YANKEE," three-car streamlined train of the Boston & Maine and Maine Central, clicked off its millionth mile during its evening run from the White Mountains vacation resorts to Boston, Mass., on August 16. The train was put in service April 1, 1935, and was the first streamliner in the East. The past two years, due to its limited capacity, the equipment has been withdrawn from its regular run between Boston and Bangor, Me., during the summer time and run as the "Mountaineer" from Boston to New Hampshire and the White Mountains resorts. All in all some 750,000 passengers have been carried on the train.

Winter months the "Flying Yankee" equipment operates 735 miles every week day and in summer about 600 miles per day. It completed 420,000 miles before its first general overhaul and an additional 557,000 miles before its second general overhaul.

Interior View of the Outer Circle Wall in the 120-Ft. Section of the Enginehouse at Oil City, Pa.

Windows in This Enginehouse Are of Glass Blocks

Structure on the Pennsylvania at Oil City, Pa., is first on this road to include this innovation in entire outer circle wall

WHEN rebuilding its 12-stall enginehouse at Oil City, Pa., last year, following its destruction by fire, the Pennsylvania provided a total of 3,800 sq. ft. of glass-block panels in the window openings in the outer circle wall and in one end wall. While this company has installed glass-block panels to replace conventional sash in a number of existing enginehouses, the Oil City project is the first new enginehouse on this road, and so far as is known on any road, in which glass blocks have been placed in most of the window openings.

The possible advantages of glass blocks in enginehouses have been a subject of study on the Pennsylvania for some years. To determine the advantages by actual observation, experimental installations of glass blocks were made in existing enginehouses at Logansport, Ind., and in the Spruce Street structure at Columbus, Ohio,* in 1937. At Logansport, the window openings in the outer circle wall at two stalls were built with the blocks, while at Columbus they were installed in the wall at three stalls.

One purpose of the experimental installations was to determine the extent of the economies in maintenance that may be effected with the glass blocks as compared with conventional glazing. Since the deterioration of steel or wood sash is an important factor in enginehouses, it was thought that the use of glass blocks would effect considerable savings. Another source of savings was expected to result from reduced breakage of the blocks as compared with conventional window glass. It was also desired to determine the nature of the daylight illumination afforded by the glass-block panels.

That the performance of the experimental installations has been favorable is indicated by the fact that the new enginehouse at Oil City has been built with glass-block windows. But this is not the only indication, as one or more glass-block panels have been installed in replacement of sash in a number of existing enginehouses on this road. On the Central region alone such panels have been installed in existing enginehouses at five locations, namely, at Ebenezer, N. Y., eight panels; Mingo Junction, Ohio, and Pitcairn, Pa., four panels each; Wheatland, Pa., two panels; and South Akron, Ohio, one panel.

The original enginehouse at Oil City was destroyed by fire on December 20, 1938. This structure was of frame construction and embodied 12 stalls, 9 of which were 110 ft. long, while the other 3 were 130 ft. long. The nine-stall portion of the structure was built about 1917, the three longer stalls being added in 1930. Since its construction, the three-stall portion of the structure, which was placed at one end of the other section and was set off from it by a partition, had housed a machine shop and toilet and locker rooms. To permit the use of the structure for these purposes, the three pits had been covered over, two with concrete slabs and the other with a timber floor.

Since the fire that destroyed the old enginehouse occurred in cold weather, it was necessary to replace the structure, in part at least, as quickly as possible, and to this end the three stalls that had been constructed in

* These installations were described in the *Railway Age* of September 3, 1938.

1930 were rebuilt on the original foundations with all possible speed. As an indication of the dispatch with which these stalls were replaced, it is of interest to note that they were ready for service within less than two weeks after the fire. The roof-supporting columns, the framing and the roof that were built for the three stalls at that time were of permanent construction, but the exterior walls were of a temporary nature. The walls were offset inward about two feet from the location of the permanent walls in order to permit the latter to be constructed later on without disturbing the temporary siding.

After the three stalls had been completed, they were used for handling locomotives while the other nine stalls were rebuilt. These stalls were increased in length from 110 ft. to 120 ft., and extensions 22 ft. 2¾ in. long were built onto the existing engine pits. After the nine stalls had been reconstructed and placed in service, the use of the three 130-ft. stalls for handling locomotives was discontinued, the pits were covered over and these stalls were again converted into a machine shop and provided with toilet and locker rooms for employees.

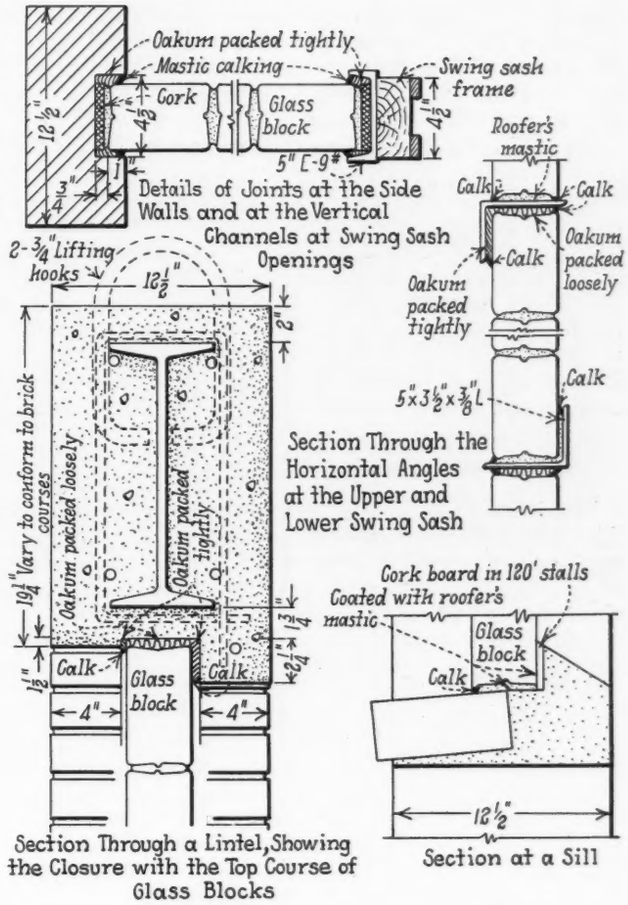
Type of Construction

Except for the use of glass blocks in the window openings, the new enginehouse is largely of conventional construction and conforms in most respects to recent practice in this regard on the Pennsylvania. In plan, the structure is of the typical polygonal shape with the one exception that the outer corner at the 130-ft. end is truncated. It is of the monitor type and embodies brick walls (except as noted later) and a timber roof supported on wood columns and framing. The walls, as well as the interior columns, are carried on concrete foundations. In the three-stall section, as mentioned previously, the old foundation, including the column footings, was incorporated in the new structure, but in the nine-stall portion the entire structure is new except for the original parts of the engine pits.

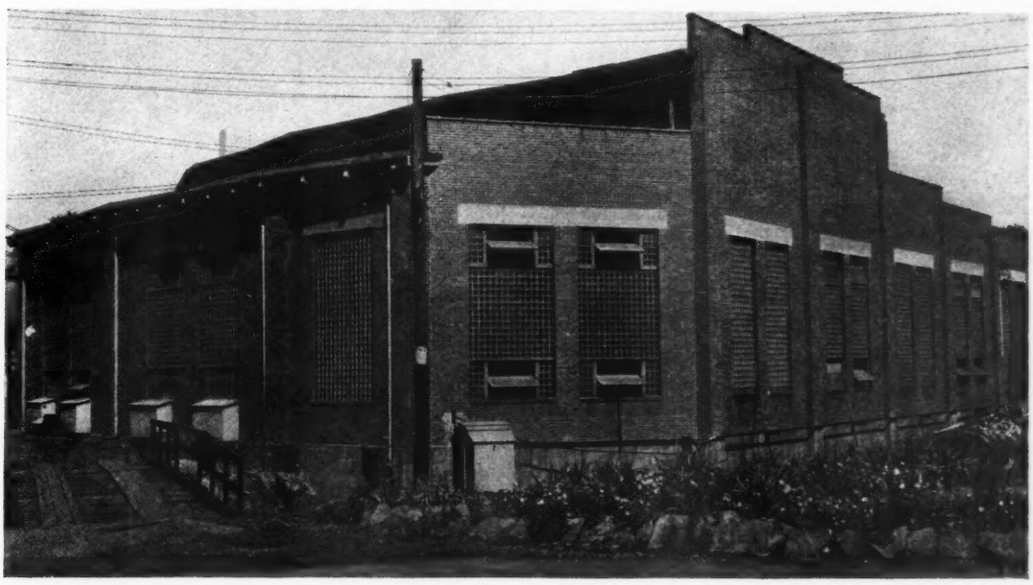
The inner circle wall of the new structure has cast-iron columns and lintels and double-hinged timber doors, the upper portions of which are fitted with wood sash. Originally, the structure had a wood-block floor throughout but in the reconstruction work the wood blocks in the nine-stall section were replaced with concrete. In the three-stall section, however, the wood-block floor was left in place as it had not been badly damaged during the fire.

Between the adjoining 130-ft. and 120-ft. stalls a hollow-tile partition is provided, which includes a sliding door at the end that joins the outer circle wall. At the opposite end of the nine-stall section, where any future addition to the enginehouse would be constructed, the outside wall is of tile construction and the windows are fitted with wood sash glazed with double-strength glass, these being the only windows of this type in the structure.

All timber columns and framing in the reconstructed enginehouse are of long leaf yellow pine which, in the


Oakum packed tightly
Mastic calking
Swing sash frame
Cork
Glass block
Roofer's mastic
Calk
Details of Joints at the Side Walls and at the Vertical Channels at Swing Sash Openings
2-¾" Lifting hooks
Oakum packed loosely
Oakum packed tightly
5"x3½"x⅜"L
Section Through the Horizontal Angles at the Upper and Lower Swing Sash
Vary to conform to brick courses
Cork board in 120' stalls
Coated with roofer's mastic
4"
Section Through a Lintel, Showing the Closure with the Top Course of Glass Blocks
Section at a Sill

Typical Details of Glass-Block Panels



This View of the 130-Ft. Section Shows the Outer Circle Wall and a Portion of the End Wall

nine-stall section, is treated with chromated zinc chloride. However, in the construction of the three-stall section, the necessity for expediting the work did not allow sufficient time for obtaining treated timber and it was necessary to use untreated material.

All roof areas of the structure are covered with composition roofing placed on 2-in. wood sheathing. As a fire protection measure, baffles constructed of gypsum wall board were placed under the roof at the one-third points in the nine-stall section. All timber surfaces in the enginehouse were painted white except the lower ends of the columns, which were painted black. Ample ventilation is afforded by movable sash placed in certain of the glass-block panels, as explained later, and by louvers of wood construction along both sides of the monitor and above the doors in the inner circle wall.

Size and Location of Windows

The brick walls in the new enginehouse are 12½ in. thick and embody pilasters in the outer circle wall at the angle points between stalls, and at regular intervals elsewhere. In the outer circle wall of the nine-stall section, the distance between the center lines of adjacent pilasters is generally 38 ft. 8½ in. and in each of these spaces, with one exception, there are two panels of glass blocks, each 9 ft. 9¾ in. wide and 14 ft. high, this being the height of all glass-block panels in the structure. The one exception in the arrangement of the panels occurs in a section of the wall that contains a double-hinged door, and in this section there is only one glass-block panel which is 7 ft. 3¾ in. wide.

In the 130-ft. portion of the structure, two sections of the outer circle wall are 30 ft. long, and in each of these there are two glass-block panels, each 7 ft. 3¾ in. wide. At the outer end of the third or end stall, which incorporates the truncated corner, there are three panels of the same width, one in the circle wall and two in the truncated corner, while in the end wall there are eight such panels, arranged in pairs between pilasters, and these are all 5 ft. 3¾ in. wide. Thus, there are a total of 34 panels of glass blocks in the structure.

Details of Lintels

In alternate sections of the outer circle wall and the end wall, each of the glass-block panels has two center-hung movable windows for ventilating purposes, one at the top and the other at the bottom of the panel. These windows embody wood sash glazed with double-strength glass. In the panels that do not have swing sash, the glass blocks are laid up solid.

All the glass-block panels have lintels consisting in each case of a reinforced concrete beam incorporating a 15-in. I-beam, and where the windows are arranged in pairs the lintel is continuous across both panels. The lintels were precast on the job and, to facilitate their handling, two lifting hooks were cast in each of them. They are of the same thickness as the wall and in each case have a recess, 4½ in. wide, in their undersides for receiving the glass blocks. As to their depth, the lintels were so proportioned that in each case the underside of that part of the lintel in front of the recess is about flush with the upper surface of the top course of glass blocks. To provide a backing for the top course of blocks, each lintel was made 1¾ in. deeper behind the recess than in front of it. The lintels are each 1 ft. 7¼ in. deep in front of the recess and 1 ft. 9 in. behind it.

Along the vertical sides of the window openings recesses, 4½ in. wide and 1¾ in. deep, were provided for receiving the edges of the glass-block panels. The window sills on the exterior are of brick construction, while on the interior of the structure they are of concrete and are shaped with a mortise-like section to provide a backing for the lower course of glass blocks.

Features of Glass Blocks

The glass blocks that were used in this structure are manufactured by the Pittsburgh Corning Corporation. These blocks have smooth exterior faces, but the interior surfaces are fluted and the two parts forming each block are so assembled that the flutes on opposite sides of the interior are arranged at right angles to each other. The blocks are 5¾ in. square and 3⅞ in. thick, and were laid up with mortar joints of such a thickness as to give the blocks effective dimensions of 6 in. by 6 in. Each fourth horizontal joint in the glass-block panels was provided with a metal wall tie.

Along the vertical sides of the panels, the blocks extend into the 1¾ in. grooves a distance of 1 in. In making these closures a strip of cork board, corresponding in width to the thickness of the glass blocks, was placed in the bottom of the recess, and as the blocks were laid up the space between the cork board and the edges of the blocks was filled with mortar. The openings between the faces of the blocks and the sides of the recess were then filled with oakum, which was packed in tightly, and then closed with mastic calking.

At the top of each panel, the space between the upper surface of the glass block and the bottom of the recess in the lintel was filled with loosely-packed oakum, while the openings on both sides of the recess were closed with the same material, packed tightly and calked. At the bottom of each panel a mortar joint, calked on the outside, was provided between the lower course of blocks and the sill. Before making this joint, the surface of the sill was coated with roofers mastic. At all panels in the 120-ft. section of the enginehouse, a cork board was placed between the glass block in the lower course of each panel and the backing provided by the interior concrete sill.

Where openings were provided in the glass-block panels for receiving the swing sash, structural shapes were used for forming the frames. All swing sash in the outer circle wall of the structure are surrounded on three sides by glass blocks, and here the vertical sides of the openings embody 5-in. channels while the horizontal sides are formed by 5-in. by 3½-in. by ⅜-in. angles. These shapes are welded together at the corners of the frames. The channels in the frames are so placed that the legs of each member form a recess for the adjoining glass blocks and these closures are made in the same manner as those along the vertical sides of the panels.

Swing Sash Openings

In all cases, the angles forming the horizontal sides of the openings for the swing sash extend entirely across the panels. Where glass blocks rest on these angles, mortar joints, calked at the edges, were provided, the surface of the metal first being coated with roofers mastic. The closure between each angle and the glass blocks below it was made by filling the joint with oakum and calking it. In the end wall of the 130-ft. section of the structure, the swing sash extend entirely across the panels, and here the openings for the sash do not involve the use of channels.

The reconstruction of the enginehouse at Oil City was carried out under the general supervision of C. I. Leiper, chief engineer of the Central region, and J. F. Leonard, engineer of bridges and buildings. D. L. Sommerville, assistant engineer, was in direct charge of the work. The reconstruction of the three-stall section immediately

following the fire was carried out under contract by the W. F. Trimble & Sons Co., Pittsburgh, Pa., while the Rust Engineering Company, Pittsburgh, constructed the nine-stall section and later remodeled the interior of the three 130-ft. stalls.

Down-to-Earth Facts On Produce Trucking

A DETAILED study of the operation, rates and earnings of 161 for-hire truck operators resident in an area 65 mi. north and west of Indianapolis, Ind., and engaged primarily in the transportation of farm products, has recently been made by C. M. Hardin and T. K. Cowden, of the Department of Farm Management of Purdue University, Lafayette, Ind., the results of which are published in Bulletin No. 446 of the Agricultural Experiment Station. The authors conclude from their study that profits from such trucking are far from large and that many of the owners failed to earn a profit sufficient even to afford them normal wages. Speaking of rates, the authors write: "Because of the ease with which admittance can be gained to the trucking business, and because of the great amount of competition in the transportation field generally, charges for hauling farm products will probably continue to be adjusted at a level which will return normal wages to the truck operators."

Of the total of 204 trucks covered by the questionnaire and interview program—it was found that total taxes (including gasoline taxes) paid by these for-hire operators per mile of travel on the public highways were less than for farmer-owned trucks analyzed in a previous study by the same authors, although the for-hire trucks on the whole were heavier and enjoyed fuller loadings. For the for-hire trucks studied it was found that total taxes per mile of travel on highways amounted to 0.65 cents for 1½-ton trucks and 1.04 cents for semi-trailers, as compared with 1.12 cents for farmer-owned trucks previously studied. (This latter investigation showed that 28 per cent of the miles traveled by farmers' trucks were on the farm. Therefore, total gasoline taxes were apportioned to only 72 per cent of the total miles driven in order to calculate taxes for each mile that the trucks were used on the highway.)

The average 1½-ton for-hire truck included in the study was driven 24,112 mi. per year at a total annual cost of $1,013, or 4.2 cents per mile. The cost per mile of operation decreased as the number of miles per year increased. Gasoline was the most important item of cost, amounting to a little over 41 per cent of the total. Depreciation amounted to 20 per cent of the total cost. Revenues per mile of travel for all operators, including those of heavier semi-trailer combinations, averaged 9.1 cents and cost of operation, including labor, amounted to 8.0 cents per mile, leaving a profit of 1.1 cents per mile traveled. About one-third of the trucks were not protected by either public liability or property damage insurance.

The study showed that returns were not large. On the average, each operator spent three-fourths of his time in the trucking business. Total return for his labor and management amounted to $917 per year. Computed on a weekly basis this amounted to $17.60 for approximately three-fourths of his time, while on a load basis it amounted to $2.24 per load. After paying expenses about 11 per cent of the truckers had nothing left for a year's work, 50 per cent had between zero and $1,000 and approximately 6 per cent had more than $3,000 for their efforts. "If the value of each operator's labor is considered, nearly 44 per cent of the truckers failed to make returns sufficient to pay the operator what they considered their time to be worth. Five per cent had a profit of $3,000 in addition to the value of their own labor." The rates charged (most of which were on a contract basis) varied substantially as between types of haul and classes of commodities, but on the whole were found to be relatively high. For hauling livestock to the Indianapolis stockyards, for example, the rate per ton-mile ranging from 10.4 cents for a haul of 21 to 30 mi. to five cents for 71 to 80 mi.

It was found that the availability of return loads is an extremely important factor in determining whether profits were to be derived. The truckers who received more than $100 per year for return loads from Indianapolis enjoyed returns for their labor averaging $1,845, compared with an average return of $917 for all truckers studied. "This indicates that the truckers who made the most money recognized the importance of return loads for profits." Apparently, however, return loads were hard to get, for all trucks included in the study obtained return loads on only 3.3 per cent of their total trips.

The authors point out that recent legislature in the state has tended to discourage the hauling of return loads. Truckers are required to obtain a freight license and purchase additional insurance in order to haul manufactured goods. Thus operators who formerly hauled livestock to the Indianapolis stockyards and brought back a load of manufactured goods to dealers in their own communities are now required to take on additional obligations. The authors obtained no data as to the amount of decrease of return loads since establishment of the license requirement but found that only about 5 per cent of the farm products haulers had obtained freight licenses at the time of the survey.

The study includes some interesting data concerning the background of the 161 truck operators questioned. At the time of the study the average trucker had been in business 9.4 years. Since entering the trucking business the operators of one truck only had owned and disposed of 4.8 vehicles while the operators of two or more regular units had turned over 9.3 vehicles. Some 57 per cent of the truckers had farmed prior to entering the trucking business; another 11 per cent had operated vehicles in some other line of business while 7 per cent had worked in shops or on railroads. Six per cent commenced the trucking business immediately upon the completion of schools, while the remaining 19 per cent were engaged in a number of activities prior to entering the business.

When interviewed the truck operators made some significant comments concerning loading experiences. Estimating that five tons was a full load for their vehicles, the operators of the 1½-ton trucks declared that their vehicles were empty 48 per cent of total miles traveled; half a load or less was carried on 22 per cent of the mileage and on the remaining 30 per cent their vehicles carried over one-half of their practical load capacity. The operators of semi-trailer combinations, who considered nine tons to be their full load, estimated 49 per cent empty mileage, one-half or less of a load on 8 per cent of their mileage and over one-half a load on the remaining 43 per cent.

ROOMETTE-BEDROOM CARS were inaugurated in service between New York and Detroit, Mich., by the Pennsylvania on August 11 when new Pullmans containing 10 roomettes and 10 bedrooms each were placed on the "Red Arrow."

NEWS

SSW Debate Gets a Little Heated

Litigant contends S. P. didn't do right by Cotton Belt—Dey and Turney deny charge

A feeling of intense bitterness engendered by long days of litigation in several courtrooms in the country was evident and the tempers of attorneys several times flared into the open in an Interstate Commerce Commission hearing room on October 3, when the full commission heard oral argument on the now much-litigated question of whether the Southern Pacific brought about the bankruptcy of the St. Louis Southwestern by the former's failure to solicit traffic preferentially for the latter, which it controlled through stock ownership. The commission had several months ago reopened the Cotton Belt's reorganization case in order that this question might be settled, and Commissioner Aitchison had held exhaustive hearings in order that the commission might have all the facts on which to base its decision.

The principals in this courtroom drama were Walter E. Meyer, stock broker of New York and investor to the extent of approximately $1,000,000 in the common stock of the Cotton Belt, who has repeatedly, over a period of 10 years, started suit after suit in an attempt to prove that the Southern Pacific was derelict in its duty to the Cotton Belt; John R. Turney, special counsel for the Cotton Belt and its former chief traffic officer and counsel; and Ben C. Dey, general counsel for the Southern Pacific.

The gist of Mr. Meyer's contention appeared to be that the Southern Pacific, after it had obtained control of the Cotton Belt through the ownership of some 87 per cent of its common stock, had failed to "do everything that it should have done for the Cotton Belt" in the way of soliciting traffic. During his 2½ hour oral argument Mr. Meyer accused the Southern Pacific of "short-hauling itself to the extent of $14,035,000," thus depriving the Cotton Belt of that sum of money over a three-year period. He further charged that the Southern Pacific acquired control of the Cotton Belt "just to get Kuhn, Loeb & Co. out of a bad fix." He went on to contend that the banking house had purchased the Cotton Belt stock from other interests and alleged that it had to get rid of it to save its investment.

Mr. Dey began his argument by characterizing Mr. Meyer as one of "those chronic litigationers" who was out to "get" the Southern Pacific regardless of the merits of his cause or the amount of money required to carry out the litigation. He then pointed out to the commission that at one time Mr. Meyer had a chance to sell his holdings in the Cotton Belt for twice as much as he had paid for them, thus demonstrating that he was not interested in having the Southern Pacific make whole his investment as he has often charged in briefs submitted to the courts and to the commission.

"There is nothing to this case but Walter E. Meyer," charged the S. P. general counsel. "We want you commissioners to settle this case once and for all. Make complete findings and if any of the directors of the Southern Pacific have acted fraudulently, then specifically include that in your findings. We are sick and tired of this case and want the final word written in it so that the book may be closed."

Mr. Dey denied all the charges that Mr. Meyer made regarding the control of the Cotton Belt, telling the commission that the Southern Pacific had purchased control of that road to preserve its outlets in Texas and to prevent the Van Sweringens from getting a stranglehold on all of the lines in the southwest and dictating the companies to which the S. P. would have to turn over its transcontinental traffic.

The late Hale Holden, former chairman of the board of the S. P., not Kuhn, Loeb & Co., brought about the purchase of the Cotton Belt, averred Mr. Dey. He went on to say that during the 10 years that he had sat on the board of the S. P., not once had Kuhn, Loeb & Co. ever stepped inside of the door or attempted to dictate to the company in any shape or form. He also denied that the S. P. had recently moved its general offices from New York to San Francisco and had replaced eastern men on the board with western directors because of pressure exerted by Mr. Meyer in his present suit.

Mr. Turney, in his argument, raised questions of the validity of the traffic figures used by Mr. Meyer in support of his allegation that the traffic of other connections of the S. P. had increased while that of the Cotton Belt had gone down during the period of S. P. control.

P. R. R. Derailment Kills Head-End Crew

The derailment of a train of express cars on the Pennsylvania's main line near Trafford, Pa., (17 mi. east of Pittsburgh, adjacent to Pitcairn yard) on September 27, caused the death of the engineman and fireman. The cause has not yet been determined.

Carrier Adequacy Report by Budd

Defense load only 10 per cent for all roads, though it is 50 per cent for some

A firm conviction that national defense will be provided with ample transportation facilities was expressed by Ralph Budd, commissioner in charge of the transportation division of the National Defense Advisory Commission, in an address delivered over the nationwide hook-up of the National Broadcasting Company from Station WRC in Washington, D. C., on October 3. Mr. Budd prefaced his remarks by observing that the present defense program places upon the transportation facilities of the country an added duty of unknown extent, but of a character "not very different from that which they perform normally." He proceeded to point out that the moving of materials for the manufacture of munitions, machines, tools, and housing for defense calls for the same transportation service as if those materials were moving in ordinary commerce.

At the outset of his speech the defense commissioner told his radio audience that his approach to the job of defense transport was by way of determining and setting up an ideal goal of accomplishment which might be stated as follows: "To anticipate the needs as far in advance as possible, and to provide for them, so that transportation will always be available for those who have goods to move, or traveling to do, and that efficient service always will be given by the particular agency which the patrons choose to use. This, of course, includes the duty of providing, at the same time for defense needs and for travel and transportation other than that related to defense."

By understanding this goal and accepting the challenge involved, Mr. Budd believes that it can best be accomplished, and he was glad to report that the plan is being followed and that representatives of all forms of transportation are giving their fullest cooperation.

The radio audience was also reminded that the country no longer relies upon one type of carrier, but now has five. In this regard Mr. Budd observed that the railways still handle about two-thirds of the freight, but that there are 1,000,000 miles of surfaced highways in the country and 26,000,000 automobiles and 5,500,000 freight trucks and trailers operating on these highways. Waterways, he said, also have a

(*Continued on page 524*)

Atlantic Board Scans Facilities

Shippers advisory board in Rochester hears reports on car supply, port adequacy

Pros and cons on the sufficiency of present railroad car supply for defense needs took the spotlight at the fifty-third regular meeting of the Atlantic States Shippers Advisory Board at Rochester, N. Y., on October 2 and 3. It was the chief contention of the Emergency Port Transportation Committee, headed by C. J. Fagg, traffic manager of the Newark (N. J.) Chamber of Commerce, "that a vast railroad car building program should under no circumstances take place until the railroads have co-operated to determine the economics of the problem as to whether equipment is needed, for as stated previously, it is the shippers who have to pay this bill."

The committee's report presented a large body of data showing increases in the tractive power of locomotives, capacity of cars, increased speed of freight trains, increase in loading factor, etc., designed to meet contentions that the total number of units of locomotives and cars are considerably less than during the last war. Giving its approval in part to figures presented by M. J. Gormley, executive assistant, Association of American Railroads, before the Northwest Shippers Advisory Board on July 25, the report called attention to the fact that he did not incorporate in his analysis mention of the fact that in war emergency normal business conditions are interrupted and certain individual enterprises cease or are curtailed, thereby decreasing normal commercial traffic considerably.

Figures were presented at the meeting showing that 163,897 cars of export freight were handled at North Atlantic ports in the first six months of 1940, an increase of 80 per cent over the corresponding period of 1939, during which period there was no serious accumulation or congestion. During the first six months of 1940 the South Atlantic and Gulf ports handled about 94,000 cars of export freight, an increase of 20 per cent over the corresponding period of 1939. These port tonnages were handled with only one minor controlled embargo on one commodity which was agreed upon in advance by shippers and the carriers at the request of the former, which embargo did not interfere with the normal flow of traffic. As for storage space at ports it was pointed out that at North Atlantic ports in August, the railroads possessed covered space to accommodate 14,000 cars; only about 5,000 cars used this space during the month.

In addition the carriers have open pier and ground storage space for about 25,000 cars, which was utilized during August to the extent of about 4,000 cars. It was pointed out that in August a small accumulation of cars was occurring at two or three out-port points, a number of cars being held on track for a period of longer than 10 days. But as of September 18, as far as the port committee knew, "such accumulations had been cleaned up and there is nothing of a disturbing nature of loaded or empty equipment at out ports."

Commodity committees of the board estimated an increase of 15 per cent in car loadings for the last quarter over 1939. This average reflects anticipated increases in all classifications except fresh fruits. Important percentage increases include 32 per cent for autos and trucks, 25 per cent for brick and clay products, 24 per cent for castings, machinery and boilers and 20 per cent for iron and steel. The less-than-carload committee anticipated increases of from 5 to 25 per cent for the final quarter.

At the freight loss and damage prevention meeting on October 2, a special committee of the board recommended that a training school on the packing and shipping of freight be established to instruct employees in preventing loss and damage of goods in transit. Such a school would be set up under the jurisdiction of the Freight Container Bureau of the A. A. R. and would be attended by employees selected by industrial concerns. Educational methods would include demonstration, lectures and class room practice. It was suggested that a preliminary two-day school be set up in Philadelphia, Pa., to be limited, for experimental purposes, to 25 shipping-room employees.

Chicago Traffic Club to Hold Annual Dinner January 16

The Traffic Club of Chicago will hold its annual dinner at the Palmer House, Chicago, on January 16, 1941.

N. I. T. League to Meet in New York November 14 and 15

The National Industrial Traffic League will hold its annual meeting in New York on November 14 and 15.

Western Railway Club

The Western Railway Club, Chicago, will open its season with an "Executive Night" program on the evening of October 21, with an address by J. L. Beven, president of the Illinois Central.

C. & N. W. Directors Vote to Appeal Revamp

Directors of the Chicago & North Western, on October 9, voted to appeal the Federal District Court's approval of the Interstate Commerce Commission's plan of reorganization for the carrier.

President Hasn't Yet Decided on Transport Study Board

Responding to a question at his October 8 press conference, President Roosevelt stated that he did not know whether the three-member board of investigation called for in the Transportation Act of 1940 would be appointed by him before or after some preliminary statement comes out of the study now being made under the supervision of Owen D. Young for the National Resources Planning Board. The President said he knew nothing about the rumor to the effect that the appointments would be delayed until after the Young group had been heard from.

21st N. & W. Better Service Conference

National-defense theme was dominated at last week's Roanoke meeting

With their separate messages blending to become a resounding call for patriotic co-operation in the national defense program, speakers at the Norfolk & Western's Better Service Conference last week emphasized the necessity for a self-fostering within each individual railroader of a bed-rock disposition to combine good citizenship with shoulder-to-the-wheel railroading in order that the carriers may play with distinction their proper role in any emergency which may confront the country. The conference, held on October 4 and 5 at the Hotel Roanoke, Roanoke, Va., was the 21st annual meeting of delegates representing the Better Service Clubs located throughout the N. & W. system; the general chairman was L. C. Gardner, general claim agent of the N. & W., and approximately 600 delegates and guests were in attendance.

The conference's national-defense keynote was sounded at the opening session in addresses by N. & W. Vice-Presidents R. H. Smith and Sydney F. Small. And the theme was touched upon by most of the other speakers who were: R. V. Halsey, assistant general solicitor of the N. & W.; Dr. Alfred P. Gaines, president of Washington & Lee University, Lexington, Ky.; Walter C. Neely, president of the Mutual Fire, Marine & Inland Insurance Company, Philadelphia, Pa.; Arthur von Thaden, assistant manager, Insurance Department, Chamber of Commerce of the United States; George Dunglinson, Jr., N. & W. vice-president in charge of traffic; and Joe Marshall, special representative, Freight Claim Division, Association of American Railroads.

Assistant General Solicitor Halsey was the speaker at October 4's luncheon session where R. G. Henley, N. & W. superintendent of motive power, served as toastmaster; Dr. Gaines spoke on the same day at the dinner which was presided over by Toastmaster L. C. Ayers, general superintendent of the N. & W.s' Eastern General Division. The other addresses were delivered during business sessions where the delegates also heard reports of the six committee groups into which they were divided.

With General Chairman Gardner presiding, the opening session on October 4 got under way with an address of welcome by Mayor Walter W. Wood of Roanoke. The mayor was pleased to be on hand to welcome the "management and employees of a company that has contributed so much to the growth of our city"; that has "never failed to come through 100 per cent." Vice-President and General Manager Smith added "the special welcome of the N. & W. Railroad," and proceeded to make his contribution to the conference's national-defense theme. First, however, he recalled how the railroads had successfully met the test put upon them by last year's

peak traffic loads, adding that today they are undergoing another test.

"We are," Mr. Smith went on, "embarked on a program of preparedness and strengthening which we hope will make our country an unassailable stronghold of the forms of government, customs and individual citizens' rights which we value so highly. I do not think that anyone questions that such is our proper policy. But we must not fool ourselves into thinking that this can be done by magic, or that the doing will be a joy ride. It can be done only by a sincere national effort and by a willingness on the part of the individuals who collectively make up the United States to make the effort and necessary personal sacrifice. It will require the cooperative efforts and the best performance of all our major industries, including particularly our railroads.

"Real defense strengthening, real preparedness can come to our country only through a realization that it is something necessary, desirable and worthwhile, and through a willingness on the part of each citizen to pay whatever may be his part of the price for it. Work, thrift, initiative, enterprise and a willingness to sacrifice for a worthwhile cause are the traits that built our nation, and they are the ones we must keep for it if we are to make it strong in a world where only the strong can survive. Those traits are also the ones which made the N. & W. a great railroad and they are ones without which it cannot remain a great railroad."

Vice-President Small, who is in charge of taxation and public relations, made part of his address a follow-through from Mr. Smith's lead, but he also outlined the role of the individual employee in the N. & W.'s public relations program. Reminding the delegates that the meeting they were attending was the 21st, Mr. Small went on to suggest that the Better Service Conference, having thus become of age, was faced with "new responsibilities and obligations." After next recalling past achievements of the Conference and the N. & W., the speaker called for preparations for the future.

Citing "events of the past 12 months" which have proved that "fifty million Frenchmen" could be wrong, Mr. Small warned that "America must not make the same tragic mistake." He does not think it will "if American labor and industry can prevent it—and they can." Then after proceeding to call for an alert citizenry in the face of subversive movements, the N. & W. vice-president had this to say: "We are embarking on a most stupendous program of national defense. It would be an insult to your intelligence to try and convince you that this country can meet the future cost of defense and take care of its remaining heavy debt without digging deeper and deeper into the pockets of every man, woman and child in the U. S. There is, of course, only one sure way in which this increased burden of debt can be met and that is by increased national income. Unless we are prepared to tighten our belts, work a little harder, produce a little more, which may require some additional hours on the part of every one, we might find ourselves in the position of the French and become the slaves of dictatorial powers who do not believe that anyone has the right to freedom and opportunity except their own select group. The railroad industry will, as usual, be called upon to play a major part in the defense and preservation of true Americanism . . ."

Meanwhile Mr. Small had made his aforementioned remarks about the N. & W.'s public relations program. He likes to consider that phase of the railroad's activities as a "department of public information," which is constantly endeavoring to present the facts to railroad employees and to the public. "It is not," Mr. Small added, "a one-man job or the job for a department, but one in which every member of the entire family can contribute his part in creating a better public understanding and attitude." In talking about what he said was the N. & W. policy of confining its institutional advertising to "facts," the speaker by way of contrast cited recent advertising of the trucking interests as an example of "propaganda" and "a tendency on the part of competitors to stray away from the facts."

But while they talk about motor transport's annual "tax" bill and the number of people "supported" by the motor transport industry, Mr. Small has observed no attempt "to draw any comparison, or inform the public of the comparative wage scale as between the railroad and the trucking industry."

Without minimizing the "threats from across the water," Assistant General Solicitor Halsey took occasion to point out that at the same time "within our national life there are seeds of dissolution which threaten to sap our strength." The American railroads, he added, "are still engulfed in punitive and restrictive legislation." The principal present task of railroaders, as Mr. Halsey views it, is "to see that these regulatory statutes are purged of discrimination." The Transportation Act of 1940, he said, is an answer to many complaints voiced in past Better Service Conferences; but it is not a "panacea for all the ills that assail the railroad industry . . . there still remain inequities and injustices. . . ."

Framing his bill of particulars in the latter connection the N. & W. assistant general solicitor listed first the Transportation Act of 1940's "labor-protection" amendment, which he thinks is "right"—though it is nevertheless "unfair discrimination," because employees of no other industry competing with railroads have been given such protection. Likewise full-crew laws and the application of the Federal Employers' Liability Act impose upon railroads burdens "not shared by our competitors." Moreover, the Transportation Act of 1940 provided for no tolls for the use of waterways, nor did it call for discontinuance of the government-owned Inland Waterways Corporation. Finally, "the important field of taxation provides a number of illustrations of where the burden upon the railroad industry is discriminatory."

Introduced at October 4's dinner session by Vice-President Smith, Dr. Gaines, as he put it, proceeded in his address to "think out loud awhile and state to you what I think to be the situation in which you and I find ourselves as citizens of America." "We have learned," Dr. Gaines said at one point, "that war has become, not merely the clash of man power; but, through the use of materials and unlimited resources governed by scientific ingenuity, the question for every living soul on the earth. If I may use an example, which God forbid should ever come to pass; but if an enemy should ever invade our country, I am sure they would rather put the Norfolk & Western Railway out of commission than a whole division of our armed forces. I think that is an illustration that should appeal to every man of the Norfolk & Western —from the top officials to the bottom—to the men who are engaged in this most important function.

"That is true not only of the Norfolk & Western Railway, but the C. & O., and all other vital industries in this country. Everybody should remembtr that, in the next few months or years, our great crisis in patriotism as it applies to him, will be weakened or strengthened because he has or has not done the task that has been assigned to him to be done. And I lay upon your heart, as one outside of your ranks, but who has, I think, given it some thought; I lay that upon your heart, that, unless the government should call you somewhere else, you are at this moment engaged in work of the highest value and in national defense of the highest importance."

But the foregoing reference to railroading does not epitomize Dr. Gaines' address, which was on the whole an exposition of what the American way of life means to the individual, and a warning that "the time has come for us to safeguard everything that makes life worthwhile." Its close brought the audience to its feet, applauding; and it became a topic of group conversations whenever two or more of the delegates were thereafter together in the hotel lobby or the ante-rooms of the meeting halls.

Speaking at the closing session on October 5, President Neely of the Mutual Fire, Marine & Inland Insurance Company and Assistant Manager von Thaden of the U. S. Chamber's Insurance Department gave what were in the main fire-prevention talks; while Special Representative Marshall of the Freight Claim Division called for care in freight handling in order that the loss and damage bill may be kept to the minimum as business moves upward. Traffic Vice-President Dunglinson of the N. & W. explained the organization and work of the traffic department, stressing the fact that the bulk of the business "is subject to competition, and can be obtained and retained only by organized effort and efficient service."

Meanwhile the conference had received and adopted reports of its six committees presented by their respective chairmen. They were: Safety, B. A. Grubbs, chief clerk to the superintendent of safety; Service, R. A. Littrell, special representative of the superintendent of transportation; Proper Relations, J. H. Evans, assistant foreman, Roanoke; Understanding Employer's Problems, F. E. Taylor, terminal trainmaster, Clare, Ohio; Citizenship, C. C. Lankford, chief clerk to general foreman, Shenandoah, Va.; Business, C. E. Cousins, soliciting freight agent, Norfolk, Va.

General Chairman Gardner closed the conference with a brief review of the Bet-

ter Service Clubs' work. He stated that the total attendance at the 1940 meetings of the 21 clubs has been 65,000. Also, Mr. Gardner read a message from his predecessor—J. B. Baskerville, retired N. & W. general claim agent—who was unable because of illness to make a scheduled address.

Money is Voted for Bridge Act

The Congress has completed action on and sent to the President the first supplemental War Department civil functions bill for 1941, which contains an appropriation of $1,100,000 for the alteration of bridges over navigable waters under the provisions of the recently-enacted bridge bill.

Central Greyhound Seeks I. C. C. Authority

The Central Greyhound Lines, Inc., a motor carrier affiliate of the New York Central, has asked the Interstate Commerce Commission for authority to issue $150,000 10-year 3¾ per cent installment bonds, to be secured by a real estate mortgage. The funds will be used for the purpose of financing in part a new terminal in Syracuse, New York, costing a total of $225,000.

"National Defense" Rivers and Harbors Bill Passed

The Senate and House of Representatives on October 7 adopted the conference report on H. R. 9972 and thus completed legislative action on that "national defense" rivers and harbors bill which carries authorizations for projects estimated to cost $35,622,000. The bill now goes to the President who prompted its framing when he vetoed the original $109,985,000 rivers and harbors bill (H. R. 6264) with a promise to approve authorizations for projects "of national defense value."

Burlington Affiliate Seeks I. C. C. Authority

The Burlington Transportation Company, a motor carrier affiliate of the Chicago, Burlington & Quincy, has asked the Interstate Commerce Commission for authority to purchase the operating rights of Elmer Corse, doing business as the Elmer Corse Transfer Line between Quincy, Ill., and Macomb and between Carthage, Ill., and Bowan. The transportation company also requests authority to purchase the operating rights of Ralph H. Quernheim, doing business as the Quernheim Transfer, between Galesburg, Ill., and points in that state.

Would Grant R. E. A. Motor Carrier Authority

The Railway Express Agency, Inc., would be authorized to operate as a common carrier by motor vehicle in interstate commerce of general commodities, in express service, over regular routes between Bloomington, Ill., and Minonk, over U. S. Highway 51; between Decatur, Ill., and Pana, over U. S. Highway 51; and between Mattoon, Ill., and Delavan, over Illinois Highway 121 to junction of Illinois Highway 122, if the Interstate Commerce Commission adopts a recommended order of its Joint Board No. 149, composed of George W. Anderson of Illinois.

The authority would be subject to the condition that the service shall be limited to service which is auxiliary to, or supplemental of, railway express service, and that shipments transported shall be limited to those moving on a through bill of lading covering, in addition to a motor carrier movement by the company, an immediately prior or immediately subsequent movement by rail.

Pacific Railway Club to Meet October 17

The Pacific Railway Club will hold a meeting on public relations activities at the Palace hotel, San Francisco, Cal., on October 17. At that time, K. C. Ingram, assistant to president, Southern Pacific; E. C. Schmidt, assistant to president, Union Pacific; and Colonel Robert S. Henry, assistant to president, Association of American Railroads, will discuss the topic, "What Are the Railroads Doing to Improve Public Relations?"

More Copies of Regulatory Laws

Chairman Wheeler of the Senate committee on interstate commerce has introduced Senate Concurrent Resolution 55 to provide for the printing of 3,700 additional copies of the "Compilation of Federal Laws Relating to the Regulation of Carriers Subject to the Interstate Commerce Act, With Digests of Pertinent Decisions of the Federal Courts and the Interstate Commerce Commission and the Text of or References to General Rules and Regulations."

Fifty-Fourth Report of Accounting Officers

The Accounting Division of the Association of American Railroads has issued the Fifty-Fourth Report of the Railway Accounting Officers, covering the annual meeting which was held at White Sulphur Springs, W. Va., on June 18, 19 and 20. In addition to the minutes of the meeting, the report, a 318-page volume bound in cloth, contains such other information as lists of the Division's officers, of the officers and personnel of the 1940-1941 committees, and the membership roll by companies and by individuals.

First Compilation of Commodity Data by Geographic Areas

The Interstate Commerce Commission's Bureau of Statistics last week issued the first of a new series of quarterly reports which will show for Class I railroads the tons of revenue freight originated and tons terminated in carloads by classes of commodities and by geographic areas. The compilation is Statement No. Q-550, and its data are those gathered in response to the commission's order of November 16, 1939, which was noted in the *Railway Age* of December 2, 1939, page 863.

The compilation shows separately by commodities the number of tons originated and terminated in each of the geographic areas during the first quarter of 1940. The geographic areas are the states and the District of Columbia, except that the six New England states are treated as one area. Also shown are the number of tons of forwarder traffic originated and terminated. In all areas the forwarder traffic originated during this year's first quarter totaled 664,307 tons, while 664,027 tons were terminated.

I. C. C. Rescinds Foreign Commerce Orders

Because section 25 of the Interstate Commerce Act was repealed by the Transportation Act of 1940, the Interstate Commerce Commission has rescinded outstanding orders issued thereunder to promulgate regulations for rail and water carriers in foreign commerce and to designate rail stations at which information relative to the handling of export shipments should be maintained and from which the rail carriers have been required to issue through bills of lading to the foreign destination. The orders now rescinded were issued in 1922 and have been designated by Foreign Commerce Orders Nos. 3, 4 and 5.

G. M. Shriver Receives Goodrich Award

George M. Shriver, senior vice-president, Baltimore & Ohio, was presented the B. F. Goodrich award for distinguished public service at the Goodrich arena at the New York World's Fair on October 7. In his acceptance speech the B. & O. officer declared that the railroads as a whole are aware of existing and future traffic demands and have taken every means to put properties and equipment in shape. In noting the use of rubber in railroad equipment, Mr. Shriver pointed out that the B. & O. has been prompt in utilizing rubber in improving car construction, devising such methods of applying the material as to avoid the vibration of metal on metal.

September Export Traffic

Export traffic through Atlantic and Gulf ports in September was approximately 42 per cent greater than in the same month one year ago, according to reports compiled by the Manager of Port Traffic, and made public by the Association of American Railroads. Cars of export freight, other than grain, unloaded at Atlantic and Gulf ports in September this year totaled 47,901 cars compared with 33,674 cars last year, or an increase of 14,227 cars. Cars of grain for export unloaded in September at these ports amounted to 446 compared with 4,063 in September last year, a decrease of 89 per cent.

There has been no congestion or delay at the ports due to the cooperation of steamship lines, port authorities, exporters and shippers, the A. A. R. said.

Labor Asks Protection from Abandonments

The Railway Labor Executives Association has proposed to the railroads that the so-called Washington agreement which provides for dismissal compensation for railroad employees displaced by mergers or consolidations be extended to cover displacements resulting from abandonments. This proposition has been submitted to J. J. Pelley, president of the A. A. R. by James A. Phillips, chairman of the R. L.

E. A. In a letter to Mr. Pelley Mr. Phillips asked for a conference of representatives of management and employees to consider the protection of workers in abandonments. Labor leaders have taken the position that abandonments have been increasing of late years and presents a growing menace to employees.

The Washington agreement was signed May 21, 1936 and is for a five-year period, expiring in 1941. The railroads have agreed to meet with labor to discuss the proposition, but no date has been set for the meeting as this issue goes to press.

Treasury Officers Meet at Roanoke

Addresses by Robert M. Hanes, immediate past president of the American Bankers Association, and David A. Weir, assistant manager of the National Association of Credit Men, were features of the fourth annual meeting of the Treasury Division, Association of American Railroads, which was held at the Hotel Roanoke, Roanoke, Va., October 10 and 11. The meeting's presiding officer was A. E. Tate, assistant treasurer of the Southern.

Mr. Hanes, whose address was entitled "Looking Ahead," was introduced by his successor in the A. B. A. presidency—P. D. Houston, vice-president and treasurer of the Tennessee Central and a member of the Treasury Division. Other business of the meeting included reports of committees and of sectional groups.

"All-Freight" Rates to South Suspended

"All-freight" rates published in various agency tariffs for application from Eastern ports to the South and from Chicago and river crossings to the South have been suspended by the Interstate Commerce Commission which has instituted two investigation and suspension proceedings in connection therewith.

I. & S. No. 4827 covers the rates proposed for application from Eastern ports to the South, which have been suspended from October 5 until May 5, 1941. It is set for hearing November 7 before Examiner Berry at Washington, D. C. The Chicago-and-river-crossings-to-South rates have been suspended from October 7 until May 7, 1941, and will be investigated in I. & S. No. 4828. No date has been set for hearings in that proceeding.

Proposed Orders in the No. 28300 and 28310 Investigations

The Interstate Commerce Commission has issued a correction in connection with that notice wherein parties of record in the No. 28300 and 28310 investigations of the class rate structure and consolidated classification have been invited to be represented at an informal conference at Chicago on October 28. The correction runs to that reference in the original notice to the two drafts of a proposed new order to take the place of the January 9, 1940, order calling for certain traffic information. One such draft was referred to as being "confined to less than carload traffic"; whereas it should have read "confined to carload traffic." In the *Railway Age* of September 28, where the original notice was covered, the erroneous description of the order appeared on page 456 in the latter part of that paragraph which was continued from page 450.

Freight Car Loading

Loadings of revenue freight for the week ended October 5 totaled 805,986 cars, the Association of American Railroads announced on October 10. This was a decrease of 16,448 cars or 2 per cent below the preceding week, a decrease of 24,116 cars or 2.9 per cent below the corresponding week last year, but an increase of 103,370 cars or 14.7 per cent above the comparable 1938 week.

As reported in last week's issue, loadings of revenue freight for the week ended September 28 totaled 822,434 cars, and the summary for that week, as compiled by the Car Service Division, A. A. R., follows:

Revenue Freight Car Loading

For Week Ended Saturday, September 28, 1940			
Districts	1940	1939	1938
Eastern	167,150	170,566	137,287
Allegheny	170,807	168,420	128,395
Pocahontas	56,419	57,522	51,249
Southern	115,372	114,952	106,316
Northwestern ..	136,622	133,440	101,824
Central Western	119,481	123,873	113,575
Southwestern ..	56,583	60,923	58,262
Total Western Districts	312,686	318,236	273,661
Total All Roads	822,434	829,696	696,908
Commodities			
Grain and grain products	39,392	45,370	41,581
Live stock	17,517	20,252	17,205
Coal	158,484	164,369	131,492
Coke	11,690	11,038	6,415
Forest products.	40,668	37,116	32,405
Ore	67,215	60,400	29,182
Merchandise l.c.l.	158,034	162,404	157,991
Miscellaneous ..	329,434	328,747	280,637
September 28 ..	822,434	829,696	696,908
September 21 ..	813,329	809,752	669,704
September 14 ..	804,309	800,431	660,163
September 7 ...	695,258	662,357	568,707
August 31	768,821	716,397	648,029
Cumulative Total, 39 Weeks ...	26,585,827	24,285,944	22,139,155

In Canada.—Carloadings for the week ended September 28 totaled 61,342, as compared with 63,422 in the previous week and 68,882 a year ago, according to the compilation of the Dominion Bureau of Statistics.

	Total Cars Loaded	Total Cars Rec'd from Connections
Total for Canada:		
Sept. 28, 1940	61,342	25,445
Sept. 21, 1940	63,422	26,359
Sept. 14, 1940	61,779	26,143
Sept. 30, 1939	68,882	28,880
Cumulative Totals for Canada:		
Sept. 28, 1940	2,045,345	951,116
Sept. 30, 1939	1,830,978	804,859
Oct. 1, 1938	1,787,560	785,165

Senate Passes Refrigerator Car Bill

The Senate on October 4 passed S. 2753, the so-called refrigerator car bill sponsored by Senator Shipstead, Farmer-Laborite of Minnesota. The present version of this measure would amend the Interstate Commerce Act to give shippers of fresh meats, packing house products or dairy products the right to furnish their own refrigerator cars—provided the railroads were unable or unwilling to supply proper equipment. In other words the right of the railroads to furnish the cars is protected, if they have the equipment.

The bill, and a similar measure pending before the House committee on interstate and foreign commerce, was introduced following that May 5, 1939, notice wherein the Car Service Division announced the policy of reserving for railroads the right to furnish railroad-owned or railroad-controlled cars for the traffic involved.

Club Meetings

The Traffic Club of Philadelphia, Pa., will hold an informal dinner at the Benjamin Franklin hotel on October 14 at 6:30 p. m.

The Southwestern Car Service Association will hold its regular fall meeting at the Rice hotel, Houston, Tex., on October 24. A total of 27 subjects will be discussed.

The Car Department Association of St. Louis, Mo., will hold its next meeting at the Hotel De Soto, St. Louis, on October 15. At that time E. W. Daniels, president of the Harbor Plywood Corporation, will present a talk entitled "Plywood—Its Manufacture and Uses," supplemented by a colored sound motion picture illustrating the use of plywood in general construction and for railroad cars. J. L. Bailey, car repairman helper, Pennsylvania, located at Rose Lake, Ill., will also present a short paper entitled, "The Advantage of Welding in the Field of Car Building and Car Maintenance."

Film on Broadway Limited Now in Production

Actual filming of a new motion picture play entitled "Broadway Limited" has been initiated by the Hal Roach company at the Pittsburgh (Pa.) yards of the Pennsylvania. The latter have been metamorphized into a Hollywood studio lot by the location crew which started cameras cranking on October 8. After filming has been completed in and around the Smoky City, the Roach company will move eastward in easy stages to Johnstown, Pa., Altoona, Philadelphia and New York, photographing various scenes, including the famed Horseshoe Curve on the east flank of the Alleghenies. Later the film company will shoot scenes in and around the Chicago Union Station.

Stars of the production, which has as its theme the P. R. R.'s premier 16-hour Chicago-New York extra-fare train, will be Victor McLaglen, Carol Landis, Jack Hubbard, Zazu Pitts, Patsy Kelly and others.

Road Asks for Wage and Hour Hearing

A hearing to determine the reasonable cost to the Atlanta, Birmingham & Coast of furnishing housing and other facilities to maintenance-of-way employees will be held in the Ansley Hotel, Atlanta, Ga., on October 17, according to an announcement of the Wage and Hour Division of the United States Department of Labor. The announcement states that the railroad seeks to deduct from the employees' wages for working time lost and gasoline consumed in hauling old cross-ties used as fuel.

It is further pointed out that this is the first application by an employer for such a determination on which the Wage and Hour Division has conducted a hearing. Harold Stein, assistant director of the hearings branch of the Wage and Hour Division, will preside at the hearing. The

railroad will be represented by W. A. Spell, chief engineer, while the employees will have as their counsel Thomas Carroll, vice-president of the Brotherhood of Maintenance-of-Way Employees.

Reich-U. S. S. R. Pact Opens Rail Routes

The German Reich and Soviet Russia signed a new agreement, effective October 1, which establishes international routes and border transit stations for passengers and freight on a permanent basis, according to the German Railroads Information Office. Under the new regulations, two international routes for passenger service between Berlin, Germany, and Moscow, U. S. S. R., have been established; the southern route runs via Warsaw, Bjelostok and Minsk, while the northern one is via Koenigsberg, Tilsit and Duenaburg. The border point for the southern route is Laugszargen, and for the northern, Malkinia.

For freight traffic, eight border transit points have been established, while, it is expected, additional interchange points will be designated in the near future to handle constantly increasing international traffic between the two countries. Border stations for freight transit are, in order from south to north, Przemysl, Brest-Litowsk, Platerow, Malkinia, Prostken, Eydtkuhnen, Laugszargen and Deutsch-Krottingen.

Chicago-Miami Streamliners Will Be Placed in Service in December

December 14 has been set as the tentative date for the inauguration of three streamlined coach trains between Chicago and Miami. One of these trains, to be known as the South Wind, will be owned by the Pennsylvania and will operate over that road, the Southern and the Seaboard Air Line. Another, to be known as the City of Miami, will be owned by the Illinois Central and will operate over that road, the Central of Georgia, the Atlantic Coast Line and the Florida East Coast. The third, to be known as the Dixie Streamliner, will be owned by the Florida East Coast and will operate over the Chicago & Eastern Illinois, the Louisville & Nashville, the Nashville, Chattanooga & St. Louis, the Atlantic Coast line and the Florida East Coast. Each train will complete a round trip in 61¼ hr., with the result that it will depart from Chicago every third day and one of the trains will leave each day. The schedule provides for a running time of 29½ hours, with daily departure of each train from Chicago at 9:40 a. m. Central time and arrival at Miami at 4:10 Eastern time the next afternoon. Returning, each train will leave Miami at 6:25 p. m. Eastern time and will arrive in Chicago at 10:55 p. m. Central time the next evening.

Canadian Defense Ministry Salutes C. N. R. on Troop Movements

Appreciation for the part the Canadian National played in the movement of more than 11,000 troops to Halifax, N. S., for service across the waters between August 17 and August 24, is expressed by a recent letter from J. L. Ralston, Canadian Minister of National Defense, to S. J. Hungerford, chairman and president, Canadian National. In the communication, which is reproduced in the "Canadian National Magazine," Mr. Ralston recalls that the movement to the seaboard was made at a time when there was in progress a counter movement of thousands of refugees clearing from the same port. Despite this large volume of traffic, the minister reports that the troops arrived on schedule at Halifax with but three minor exceptions.

Mr. Hungerford, in acknowledging, replied: "Because of other concurrent and pressing demands it is true that operating department officers and staffs were required to give careful attention to the details of arrangements and exercise some ingenuity in providing for the efficient and expeditious movement of the troops in question and the receipt of your letter will, therefore, be a source of gratification and encouragement to them, as it is to me.

"I have just returned from an extensive trip of inspection over our lines in western Canada and I am sure you will be glad to know that I found amongst the staff everywhere a determination to contribute by every means in their power to the successful conduct of the nation's war effort."

D. J. Kerr, Former Lehigh Valley President, Dies at 56

Duncan John Kerr, a railroad executive bred in the James J. Hill school, whose career as president of the Lehigh Valley was unfortunately cut short last year by illness, died in Spokane, Wash., at the age of 56, on October 8.

Born in Glasgow, Scotland, on December 3, 1883, Mr. Kerr was graduated from the University of Glasgow in 1904 with degrees as Bachelor of Science and Civil Engineer. He came to America in the same year and in November entered the engineering department of the Pennsylvania at Altoona, Pa., as rodman. Five years later, he joined the staff constructing the Chicago, Milwaukee & Puget Sound (a subsidiary of the Chicago, Milwaukee, St. Paul & Pacific, now absorbed). From 1910 to 1913 he was engaged in the construction of the Oregon Trunk of the Spokane, Portland & Seattle. In the latter year, he joined the staff of the Great Northern and subsequently was appointed office engineer, thereafter being promoted to corporate engineer. During wartime federal control he was chief engineer.

Duncan John Kerr

On December 1, 1920, Mr. Kerr became assistant to the vice-president in charge of operation of the Great Northern. He remained in that post until he was appointed assistant to President E. E. Loomis of the Lehigh Valley in June, 1936. During this period, Mr. Kerr also served as president of the Cottonwood Coal Company and the Somers Lumber Company, subsidiaries of the Great Northern.

After having been groomed for his new job as assistant to Mr. Loomis, Mr. Kerr became president of the Lehigh Valley on May 5, 1937, and continued actively in this office until illness, believed to have occasioned by over-work, forced him to surrender its responsibilities temporarily to R. W. Barrett, vice-president and general counsel. On August 1, 1939, Albert N. Williams left the Chicago & Western Indiana and the Belt Railway of Chicago to become chief executive officer and chairman of the board of the Lehigh Valley, at which time he assumed most of the responsibilities of Mr. Kerr's office. Last January Mr. Williams was elected president, succeeding Mr. Kerr.

In becoming president of the Lehigh Valley Mr. Kerr succeeded Mr. Loomis as chairman of the Committee on Public Relations of the Eastern Railroad Presidents Conference. He was the author of "The Story of the Great Northern Railroad Company" and "James J. Hill" and was given the Arthur M. Wellington award by the American Society of Civil Engineers in 1933.

Car Service Division Sees Need for Purchase of 100,000 Cars

While official confirmation was unobtainable at the offices of the Association of American Railroads, it has been learned that the Car Service Division has recently completed a survey of the equipment situation, reaching the conclusion that the railroads should purchase approximately 100,000 new freight cars by October 1, 1941.

The Car Service Division reached the conclusion that the industry as a whole should have by October 1, 1941, a total of 1,680,000 cars of which 94 per cent or 1,579,200 should be in good order. After making allowances for prospective retirements and other factors the study came up with the aforementioned conclusion that the buying programs of the next 12 months should contemplate the purchase of 100,000 cars. Moreover, the study surveyed the equipment needs of each road, and broke down the 100,000 total by roads and by types of equipment.

It is understood that most of the roads have indicated a disposition to pursue equipment-acquisition programs which will be in line with the Car Service Division's conclusions; but there has been some reluctance to go along on the part of a few roads, particularly in Western territory, where there has as yet been no substantial pick-up in traffic due to the national defense program. Meanwhile, however, there have

been suggestions to the effect that the railroads should get their equipment orders placed before the car builders are booked to capacity as a result of other business coming to them in connection with the defense program.

Truck Strike Called in New York

A truck drivers' strike called by Local 807 of the International Brotherhood of Teamsters (an A. F. of L. affiliate) in New York City at 12:01 a. m. on Tuesday, October 8, tied up all intercity truck operations in and out of the city and crippled as well local urban operations until late on October 9, when employers of the latter classification met drivers' demands. At the time of writing (October 10), frantic efforts are being made by Mayor F. H. LaGuardia to bring about a settlement of the strike of over-the-road drivers which is still in effect.

The strike follows a two months' series of negotiations concerning a union demand for vacations with pay. This the three employer groups—The Highway Transport Association, Master Truckmen of America and The Merchant Truckmen's Bureau—refused to consider until the union agreed to effect a relaxation of working agreements which now provide that over-time payment begins after 5 p. m., regardless of the hour which the driver starts work.

Hardest hit by the strike have been the 250-odd over-the-road truck owners who are members of the Highway Transport Association. Practically all of these firms discontinued starting trucks out of terminals in other cities destined for New York, and several are holding freight already accepted for shipment into the city by railroad.

Would Deny Motor-Carrier Status to Allied Van Lines

Examiner B. Freidson has recommended in a proposed report an Interstate Commerce Commission finding that Allied Van Lines, Inc., of Chicago, has failed to establish that its operations have been or are those of a common or contract carrier under the provisions of the Motor Carrier Act. Thus the examiner would have the commission deny "grandfather-clause" applications and applications covering operations not eligible for "grandfather-clause" handling which have been filed by Allied Van.

After reviewing the set-up under which Allied undertakes to coordinate the operations of local haulers into a long-distance service for moving household goods, the examiner finds "persuasive" evidence that the applicant "has been and is now merely a service facility created and maintained by members of the (National Furniture Warehousemen's) Association for the purpose of discharging clerical duties in such fashion as to provide the members with easily-available district offices from which they may obtain information and assistance as to return loads and the reduction of empty mileage."

Meanwhile Mr. Freidson had pointed out how the hauling agents affiliated with Allied have, "in most instances," filed their own "grandfather-clause" applications. As for the so-called booking members, who solicit and get a commission on business turned over to the hauling agents, the examiner suggests that whether such activities constitute brokerage operations "is not a proper issue for determination in this proceeding." Amidst the evidence cited in the proposed report was the testimony of a hauling agent's representative who indicated that Allied's hold on its members is not very tight. The witness said that his company worked under Allied rules until they ran up against one which it was inconvenient to observe—then "we skipped it." Another could not recall how many Allied rules his company had "skipped."

Fifty-Thousand Turn Out for "Back to Rails" Fete

More than 50,000 railroad employees and officers from the Middle West, business and professional men and their wives participated in the second "back to the rails" celebration held at Council Bluffs, Iowa, on September 22-24, under the auspices of Back to the Rails Club No. 1. This club was organized by railroad employees a year ago in an effort to stimulate rail traffic and thereby protect their jobs. The first celebration was held on October 8-14, 1939.

The celebration this year culminated in a parade in the afternoon, a banquet in the evening and a street dance which was postponed until the next day because of inclement weather. The parade included floats by the Pacific Fruit Express; the Chicago, Rock Island & Pacific; the Illinois Central; the Chicago, Burlington & Quincy; the Chicago Great Western; the Railway Express Agency; the Missouri Pacific; the Wabash; the Chicago, Milwaukee, St. Paul & Pacific; the Chicago & North Western and the Union Pacific. A total of 972 persons were seated at the banquet in the city auditorium and 400 watched from the galleries. Women trained by the Union Pacific served the meal in 19 min.

The principal speaker was W. P. Kennedy, vice-president of the Brotherhood of Railroad Trainmen, whose subject was Railroads and Defense. Others who appeared on the program included William Jeffers, president of the Union Pacific; George A. Wilson, governor of Iowa; T. P. Schmidt, president of the club; George W. Woods, president of the Chamber of Commerce of Council Bluffs; and S. W. McCall, mayor of that city.

G. M. & N.-M. & O. Merger Had Its Side Shows

That the welding together of the Gulf, Mobile & Northern and the Mobile & Ohio to form the Gulf, Mobile & Ohio, which was completed on September 13, had its humorous points is amply demonstrated by a group of items appearing in the current issue of the "Rebel Route News." Here it is reported that a certain conductor was so anxious to signalize his connection with the new company that he ordered a new cap and coat bearing the new Gulf, Mobile & Ohio insignia two months previous to the effective date of the merger—so he would be ready. Just two minutes after news was received that the merger had been consummated, the telephone operator at the general offices in Mobile, Ala., started to greet all callers with "G. M. & O."

During early negotiations between Presidents I. B. Tigrett of the Gulf, Mobile & Northern and E. E. Norris of the Southern (which controlled the Mobile & Ohio previous to reorganization) there arose a bantering argument over the question of jurisdiction, which found form in some racy correspondence. Mr. Norris took issue with Mr. Tigrett over methods which the latter had taken with respect to administration of the Mobile & Ohio shortly after the I. C. C. had authorized the consolidation, but some time before the merger was effective. He told Mr. Tigrett to take his time and that "all that had happened up to now was that the G. M. & N. and the M. & O. had agreed to marry and had got the license, but that the ceremony had not yet been performed."

In reply Mr. Tigrett wrote, "I cannot find anything wrong with your metaphor, except to add that the plan to marry is subject to the bride's pending divorce proceedings. While it is generally conceded that during these proceedings the couple-to-be must live separately, it certainly would not seem improper for them to discuss their future and plan the course of their lives. This is, in fact, done in the most successful marriages.

"The couple might sit up late at night talking about their future home and its furnishings, and they might even discuss

A total of 972 Persons Were Served at the Banquet in the Council Bluffs Auditorium in 19 Min.

the welfare of their respective families. All of this could be done, could it not, with propriety and without any talk among the neighbors?"

Legion Convention Brings Heavy Traffic to Boston Roads

The Boston & Maine and the New York, New Haven & Hartford report that the American Legion Convention at Boston, Mass., September 21-26, inclusive, brought extraordinary railroad traffic in and out of the city.

The Boston & Maine announces that all traffic records at its North Station in Boston, Mass., were broken on the day of the American Legion party on September 24 when 114,276 passengers were handled in and out of the terminal. On the previous day 65,699 were handled. Normal traffic on a September Monday or Tuesday at the station averages 64,645 passengers.

Tabulations completed on September 28 by the road revealed that 66 special trains and approximately 300 extra coaches on regular trains were operated on September 23 and 24 to handle the extra business. The peak of the rush was from 7 p. m. until midnight on September 24 when the homeward rush began. The nearest approach to this year's record-breaking day was during the Legion party of 1930 when nearly 110,000 persons were handled at North Station in one day.

The New York, New Haven & Hartford handled 241,340 passengers in and out of Boston's South Station from September 21 to 26, inclusive. This represents about 42,000 passengers more than would normally be handled during that period. About 22,000, or some 56 per cent of this additional traffic was handled on Parade Day, September 24, when total New Haven traffic through South Station reached nearly 61,000.

Ten years ago, on Legion Parade Day of 1930, the New York, New Haven & Hartford handled through Boston a total of 86,000 passengers, an increase of 23,000, or 37 per cent over average normal weekday traffic of 63,000. Comparing the two years, it is significant that while the extra passenger traffic handled on Parade Day of 1940 was about a thousand less than that of 1930, the percentage increase was much higher than that of 10 years ago.

Claim for Day's Pay for 1½ Hours Work Denied

A claim filed by an engineman employed by the Terminal Railroad Association of St. Louis with the National Railroad Adjustment Board and seeking 8 hours pay for 1½ hours worked beyond his shift, was refused in a ruling made by Judge Royal A. Stone at Chicago on October 3, when he acted as referee for the National Railroad Adjustment Board. Judge Stone, an associate justice of the Minnesota Supreme Court, was appointed referee on April 8, 1940, and his service with the Board was terminated on May 31.

This abrupt retirement was brought about when, as a result of an alleged "leak" regarding decisions unfavorable to labor to be made by Judge Stone, the brotherhoods took the unprecedented step of withdrawing by telegram all the cases scheduled to be heard by him. At the time, Judge Stone issued a statement to the press complaining against such tactics on the part of the brotherhoods and criticizing the set-up of the board and the rules which would permit such handling.

All except one of the cases involved were "ex parte" submissions and, under the rules of the board, the brotherhoods were within their rights in proceeding as they did. In this one particular case, however, the submission had been made jointly by the railroad and the Brotherhood of Locomotive Engineers and hence it could not be withdrawn without the consent of both parties. Since this consent was not forthcoming, Judge Stone was recalled to serve as referee on this one case.

In his finding Judge Stone said, "Wrongfully to deprive one shift of its regular assignments, in order to favor another, would be a breach of the contract. But to pay damages as here demanded to the crew which profits from the wrong, rather than to those who have lost by it, just does not make sense."

Judge Stone said that jurisdictional and other rules protecting jobs and wages are indispensable. They should be enforceable by penalty or damages, whichever is called for in the contract.

"The issue is highly important to railroad labor," he continued, "because if these penalties are to continue, they should go to the men who lose, rather than to those who gain by whatever wrong there is. It is important to labor generally. The question is highly important to the public also—to the shippers and passengers who foot the bills. How much these 'penalty days' are costing, the referee has no means of knowing."

Collective bargaining, to be successful, must result in real contracts binding on all parties and must be enforced as written, he declared. "If either party can dictate the result by its 'economic powers' (with threat of strike, lockout or lay off implied) or by a threat to exercise that power, rather than law and reason, what was intended to be a contract is converted into a mere deceptive bit of paper and collective bargaining thwarted of its essential purpose," Judge Stone stated.

Campaign for St. Lawrence Power Draws Fire

Recent efforts of proponents of the St. Lawrence Seaway project to get immediate action on the electric power aspects of the program in the name of National Defense are attacked in a special report issued by the executive committee of the New York State Chamber of Commerce on October 1 and in a statement made public recently by J. D. Battle, executive secretary, National Coal Association. It is known that negotiations are currently under way between the Canadian and United States governments with the object of closing an agreement on construction at once of power development phases of the Seaway proposal. Representations from Washington are reported to have been discussed at a recent Dominion cabinet council meeting.

The Chamber of Commerce report contends that there is no acknowledged shortage of power on either side of the border today. Further, it says, "even if an emergency power shortage were in sight within the next two or three years, it is difficult to see how the construction of a plant which could not produce power for some five to eight years hence could be justified."

It is Mr. Battle's opinion that if extra power is needed for national defense purposes, the building of hydro-electric projects is about the slowest, costliest and most dangerous way to get it. Said he, "Coal-burning electric generating plants can as a rule be built in less than half the time required to construct dams and reservoirs and install turbines for water power, and we have the word of the National Defense Commission that the time element is a prime consideration and in many cases the controlling factor. The huge new steam plant in Tennessee, which the T. V. A. is constructing with the express approval of Congress, is expected to be completed and in operation in 18 months or less." As for cost, Mr. Battle points out that the construction cost of coal-burning electric generating plants per kilowatt of capacity is one-third of the capital cost of hydro-electric plants. "It is all very well to say that cost is no object when national defense is at stake, but nothing is gained by electing the much more costly and much slower route to the desired goal—namely, increased electric generating capacity."

He added to this that, "The former contention that construction of titanic hydro-power projects provided employment and primed the business pump loses all force at a time when some industries are pushed to capacity."

The coal association secretary also called attention to the fact that one of the cardinal principles of present-day military strategy is decentralization of strategic supply bases; and that a couple of direct hits by enemy bombers in time of war might easily cripple the immense hydro-power works in their vulnerable position on the St. Lawrence river. Mr. Battle concluded: "The superior advantages from the military standpoint of a dozen steam plants at separated points and independently operated, are self-evident. Finally is the geographical consideration, namely, that coal in abundance for utilization in electric power generation is at the very threshold of the area which the proponents of the St. Lawrence hydro project profess to serve."

Air and Rail Safety Records Compared

"The air lines have made very commendable strides in recent years in the safety of passenger movement, but their passenger fatality rate is still many times greater than that of the railroads," said Representative Van Zandt, Republican of Pennsylvania, in a statement appearing in the appendix to the October 2 issue of the Congressional Record. Mr. Van Zandt was replying to remarks made on September 23 by Representative Cannon, Democrat of Missouri.

The Pennsylvanian recalled that Mr. Cannon had discussed fatalities in railroad, highway, and scheduled air-line operations, quoting a figure of 5,643 killed on the railroads during the 15 months period from April 1, 1939, to June 31, 1940. He went on to point out that the figure included fatalities of all kinds; and that persons

in grade crossing accidents and trespassers accounted for 84.4 per cent of the total fatalities charged against the railroads. After setting forth in comparable form the data on air line and railroad accidents, Mr. Van Zandt had this to say:

"Steam railroads carried something more than 200 times as many passengers as did the air lines during the year 1939, and carried them an aggregate distance 30 times as far, yet railroad passenger fatalities were only about 1½ times as great as those of the air lines. If we limit the air line figures to domestic operations, there were nine passenger fatalities in 1939, or exactly one-third as many as on the railroads. However, the railroads carried 262 times as many passengers as did the air lines and carried them an aggregate distance 33 times as great. In other words, in domestic air line operations in 1939 there was one passenger fatality for each 75,000,000 passenger-miles; on the railroads there was one passenger fatality for each 840,000,000 passenger-miles.

"The air lines make much of the fact that over a certain period they carried 2,500,000 passengers a distance of more than 1,000,000,000 passenger-miles without a passenger fatality. Let us see what the railroads have done in some recent months. In February, 1940, the railroads carried 35,000,000 passengers an aggregate distance of 1,700,000,000 passenger-miles without a passenger fatality. In March, 1940, they carried 36,000,000 passengers a distance of 1,800,000,000 passenger-miles without a passenger fatality. During May and June, 1940, they caried 74,000,000 passengers a distance of 3,750,000,000 passenger-miles without a passenger fatality. The statistics are so clear and convincing that there can be no question of the comparative safety of air and rail travel. . . .

"As to employee casualties, there is no basis available for comparison. Railroad statistics showing the number of employees, hours worked, casualties, and so forth, are very detailed and complete. The air lines do not issue comparable data, nor does any government agency that we know of."

Mid-West Board Opposed to St. Lawrence Treaty

A resolution opposing ratification of a proposed St. Lawrence waterway and power development treaty with Canada was adopted by the Mid-West Regional Advisory Board at its meeting at Davenport, Iowa, on October 3. The effect of such a project, if consummated, the resolution read, will be detrimental to the economic welfare of the United States, to the industries and to the transportation agencies which serve such industries, for the following reasons:

1. The St. Lawrence river and proposed waterway project could not be used for more than seven months in each year, and as a part year facility, it is economically unfeasible and unsound.

2. Such proposed seaway could be used by only a comparatively small part of the ocean-going vessels now in service.

3. Such proposed seaway would result in a further addition to the great surplus of transportation facilities now existing.

4. The amount of traffic claimed by proponents that would be diverted to such proposed seaway would have an extremely detrimental effect upon the railroads, steamship lines and motor carriers, and ports of the United States.

5. The power project proposed as incidental to such seaway would displace vast quantities of coal now produced by United States mines and transported by United States railroads and steamship lines, and would thereby materially reduce the number of workers employed by railroads, coal mines and other industries.

6. Such proposed projects would create considerable additional burdensome taxes without compensatory benefits.

7. Such proposed projects would materially curtail and eliminate many industries which are now paying substantial taxes and would thereby materially reduce the present taxes which are now collected by the Federal, state, city and municipal governments from such sources, and require increases in taxes from other sources.

Carrier Adequacy Report by Budd

(*Continued from page 516*)

very large capacity for handling freight, and so do pipe lines, while the air lines are rapidly growing in importance.

The defense commissioner next proceeded to discuss the question of whether or not the railroads will be able to take care of the added load of defense. Taking cognizance of the situation which existed during the last World War, Mr. Budd stated that the car shortages which then developed would be shown by an impartial appraisal of the situation to have been occasioned more by failure to load and unload cars promptly than by the failure of the carriers to move the cars. The usual comment of railway men about this situation, he said, is that freight cars were used for warehouses.

"Steps are being taken, with the co-operation of shippers, both in and out of defense work," he declared, "to see that such a situation does not occur again, and I want especially to commend the Procurement and Production divisions of the Defense Council, as well as the Army and Navy personnel, for what they are doing in this regard. This problem relates almost wholly to railway traffic because the other forms of transportation, nearly always, load and unload promptly."

Another important fact which Mr. Budd felt was not often appreciated is that while the size of the railway plant in total number of miles and in total number of cars and locomotives is not as large as it was 20 years ago, the 20,000 miles of lines which have been abandoned were branch lines, not having any bearing on the present situation. Likewise, he noted, the cars and locomotives retired were of small capacity, while the new cars and locomotives are larger, and in the case of locomotives, much faster. The story is best told, he felt, by the betterment figures of the industry which show that since 1920 the railways have spent over 10 billions of dollars for improving tracks, signals, and equipment, making for much higher speeds, greater safety, and dependability.

It would seem rash, he felt, to assert an existing capacity which would handle any and all requirements, without knowing what those requirements are, but it does appear to him to be reasonable to say that by watching the development of the defense program the transportation facilities of the country can be utilized so that there will be no serious delays in moving defense materials and men, and at the same time handling the other business of the country.

"The total of this other business," he asserted, "is many times as much as the defense traffic is likely to be. In some particular places, and in some particular commodities, however, the defense requirements, added to those of other industrial activities doubtless will require special attention. For example, the defense program might add an average of 10 per cent to the total ton-miles of freight to be moved, yet in certain areas, and in certain commodities, the movement might show an increase of 50 per cent or more. Something like that has happened, and is happening at the present time. Some of the Eastern roads have been handling about 15 per cent more business than they did a year ago, while Middlewest carriers, except those originating ore, have barely held their own. The average increase for the country as a whole has been about 10 per cent."

"Similarly, in commodities, iron ore has shown an increase of 45 per cent, while livestock and grain have shown decreases. Obviously, the fact that there has been a 10 per cent increase in the country as a whole is of little practical importance to the Middlewest railroads where the agricultural loadings have decreased, or to some of the carriers serving heavy industries, whose transportation duty has been greatly increased. Those roads which handle iron ore have had to take care of their needs in the way of equipment and other facilities for about a 50 per cent increase, and it means nothing in that respect that the movement of livestock was less than last year, because livestock and iron ore are not handled in the same type of cars, or to any extent on the same tracks. The point is that the railway service, equipment and facilities can be geared to the defense load as rapidly as the defense requirements can be learned and pointed out."

In the matter of highways, reported Mr. Budd, the defense work has caused three types of improvement. These are: First, strengthening the highways and bridges of an essential network of some 75,000 miles which reach all parts of the country; second, providing so-called access highways to new defense plants and training areas; and, third, improving and enlarging the capacity of highways in industrial areas where new and expanded plants and increased employment might otherwise cause highway congestion. These things, he continued, are being done in an orderly way with forces already organized, as is also the building of railway tracks, where necessary to reach defense projects.

The requirements of defense, in Mr. Budd's opinion, seem to have distributed the total transportation load of the country more uniformly throughout the year. After pointing out that the year's peak car loading will be approximately that of last year, 861,000, Mr. Budd went on to note that the

railroads in 1940 will have handled 2,300,000 more cars of freight than they handled up to this time in 1939, and on the average, he suspected that the tons per car averaged higher this year than they did last year.

"The importance of handling more freight without a higher peak," said Mr. Budd, "is that if the traffic load can be spread more uniformly over the year, the carrying capacity of the transportation plant will be greatly increased. The normal period of heaviest loading lasts four or five weeks in the autumn, and there is a large surplus of some types of cars and locomotives during the balance of the year. The carriers would welcome a leveling off of the load curve."

Mr. Budd concluded his 15-minute speech by citing Association of American Railroad figures to the effect that the total loading for 1940 will be approximately 37,000,000 cars. A summary of the reports of the individual railroads indicate, he stated, that by September 1, 1941, there will be approximately 1,580,000 serviceable cars. This figure compares with approximately 1,500,000 on September 1 of this year, but more important, he declared, is the fact that all of the additional cars will be of the type best suited for the needs of the carriers which are providing them.

The radio audience was assured that it need have no worry about defense hampering the transportation of people. It is estimated, he concluded, that the people carried by our automobiles, buses, railways, airways, and waterways every year is the equivalent of taking every person in the United States on a trip of about 4,000 miles. He felt that perhaps 90 per cent of the total is by private automobile, railways and buses sharing most of the other 10 per cent.

August Accident Statistics

The Interstate Commerce Commission on October 8 made public its Bureau of Statistics' preliminary summary of steam railway accidents for August and this year's first eight months. The tabulation, which is subject to revision, follows:

Item	Month of August		8 months ended with August	
	1940	1939	1940	1939
Number of train accidents	573	456	4,565	3,669
Number of casualties in train, train-service and nontrain accidents:				
Trespassers:				
Killed	246	257	1,405	1,566
Injured	255	239	1,417	1,621
Passengers on trains:				
(a) In train accidents*				
Killed	...	10	66	11
Injured	53	84	640	415
(b) In train-service accidents				
Killed	3	2	7	7
Injured	195	161	1,147	1,140
Travelers not on trains:				
Killed	...	2	3	7
Injured	75	53	557	525
Employees on duty:				
Killed	43	55	339	323
Injured	1,476	1,410	11,587	10,672
All other nontrespassers:†				
Killed	120	86	1,229	927
Injured	423	427	3,735	3,334
Total — All classes of persons:				
Killed	412	412	3,049	2,841
Injured	2,477	2,374	19,083	17,707

* Train accidents (mostly collisions and derailments) are distinguished from train-service accidents by the fact that the former cause damage of more than $150 to railway property.

† Casualties to "Other nontrespassers" happen chiefly at highway grade crossings. Total highway grade-crossing casualties *for all classes of persons, including both trespassers and nontrespassers,* were as follows:

Persons:				
Killed	108	78	1,113	852
Injured	281	279	2,667	2,347

Forty Firms to Exhibit at Metal Exposition

Forty industrial concerns will place exhibits at the National Metal Congress and Exposition to be held in Cleveland, Ohio, on October 21 to 25, inclusive, in conjunction with the annual meeting of the American Welding Society. Exhibits will emphasize equipment and processes that will increase speed and dependability of fabrication in machinery manufacture, steel, shipbuilding, aircraft, railroad and other industries.

The forty companies to be represented comprise:

Air Reduction Sales Company
The American Brass Company
American Electric Fusion Corporation
American Steel & Wire Co.
The American Welding Society
Arcos Corporation
Bastian-Blessing Company
Chase Brass and Copper Co.
Eisler Engineering Company, Inc.
Federal Machine & Welder Co.
General Electric Company
Harnischfeger Corporation
Haynes Stellite Company
Hetzel Steel Form & Iron Co.
Hobart Brothers Company
Hollup Corporation
The Industrial Publishing Company
The Lincoln Electric Company
The Linde Air Products Company
Magnaflux Corporation
P. R. Mallory & Co.
Maurath, Inc.
The McKay Company
Metal & Thermit Corp.
Mine Safety Appliances Company
National Carbide Corporation
National Carbon Company, Inc., Electrode Sales Division
National Cylinder Gas Company
Page Steel & Wire division, American Chain & Cable Co.
Progressive Welder Company
Ransome Concrete Machinery Company
Resistance Welder Manufacturers Association
John A. Roebling's Sons Company
Stoody Company
Taylor-Hall Welding Corporation
The Taylor-Winfield Corporation
Una Welding, Inc.
Wall-Colmonoy Corporation
The Welding Engineer Publishing Company
Westinghouse Electric and Manufacturing Company
Wilson Welder & Metals Co.

Meetings and Conventions

The following list gives names of secretaries, dates of next or regular meetings and places of meetings:

AIR BRAKE ASSOCIATION.—R. P. Ives, 350 Fifth Ave., New York, N. Y.

ALLIED RAILWAY SUPPLY ASSOCIATION.—J. F. Gettrust, P. O. Box 5522, Chicago, Ill. Annual meeting, October 22-25, 1940, Hotel Sherman, Chicago, Ill.

AMERICAN ASSOCIATION OF FREIGHT TRAFFIC OFFICERS.—W. R. Curtis, F. T. R. M. & O. R. R., 327 S. La Salle St., Chicago, Ill.

AMERICAN ASSOCIATION OF GENERAL BAGGAGE AGENTS.—E. P. Soebbing, 1431 Railway Exchange Bldg., St. Louis, Mo. Annual meeting, October 22-24, 1940, Miami, Fla.

AMERICAN ASSOCIATION OF PASSENGER TRAFFIC OFFICERS.—B. D. Branch, C. R. R. of N. J., 143 Liberty St., New York, N. Y.

AMERICAN ASSOCIATION OF RAILROAD SUPERTENDENTS.—F. O. Whiteman, Room 332, Dearborn Station, Chicago, Ill. Annual meeting, June 3-5, 1941, Chicago, Ill.

AMERICAN ASSOCIATION OF RAILWAY ADVERTISING AGENTS.—E. A. Abbott, Poole Bros., Inc., 85 W. Harrison St., Chicago, Ill.

AMERICAN ASSOCIATION OF SUPERINTENDENTS OF DINING CARS.—F. R. Borger, C., I. & L. Ry., 836 S. Federal St., Chicago, Ill.

AMERICAN RAILWAY BRIDGE AND BUILDING ASSOCIATION.—F. O. Whiteman, Room 332, Dearborn Station, Chicago, Ill. Annual meeting, October 15-17, 1940, Hotel Stevens, Chicago, Ill.

AMERICAN RAILWAY CAR INSTITUTE.—W. C. Tabbert, 19 Rector St., New York, N. Y.

AMERICAN RAILWAY DEVELOPMENT ASSOCIATION —E. G. Reed, Union Pacific R. R., 1416 Dodge St., Omaha, Neb. Next meeting, October 24-26, 1940, Willard Hotel, Washington, D. C.

AMERICAN RAILWAY ENGINEERING ASSOCIATION.—Works in cooperation with the Association of American Railroads, Engineering Division.—W. S. Lacher, 59 E. Van Buren St., Chicago, Ill. Annual meeting, March 11-13, 1941, Palmer House, Chicago, Ill.

AMERICAN RAILWAY MAGAZINE EDITORS' ASSOCIATION.—M. W. Jones, Baltimore & Ohio R. R., 1105 B. & O. R. R. Bldg., Baltimore, Md. Annual meeting, October 17-18, 1940, De Soto Hotel, Savannah, Ga.

AMERICAN RAILWAY TOOL FOREMEN'S ASSOCIATION—G. G. Macina, C., M., St. P. & P. R. R., 11402 Calumet Ave., Chicago, Ill.

AMERICAN SHORT LINE RAILROAD ASSOCIATION. —J. H. Huntt, Tower Bldg., Washington, D. C. Annual meeting, November 11-12, 1940, Hotel Morrison, Chicago, Ill.

AMERICAN SOCIETY OF MECHANICAL ENGINEERS. —C. E. Davies, 29 W. 39th St., New York, N. Y.
Annual meeting, December 2-6, 1940, New York, N. Y.
Railroad Division, C. L. Combes, *Railway Age,* 30 Church St., New York, N. Y.

AMERICAN TRANSIT ASSOCIATION.—Guy C. Hecker, 292 Madison Ave., New York, N. Y.

AMERICAN WOOD PRESERVERS' ASSOCIATION.—H. L. Dawson, 1427 Eye St., N. W., Washington., D. C. Annual meeting, February 4-6, 1941, Brown Hotel, Louisville, Ky.

ASSOCIATION OF AMERICAN RAILROADS.—H. J. Forster, Transportation Bldg., Washington, D. C.
Operations and Maintenance Department.—Charles H. Buford, Vice-President, Transportation Bldg., Washington, D. C.
Operating-Transportation Division. — L. R. Knott, 59 E. Van Buren St., Chicago, Ill.
Operating Section—J. C. Caviston, 30 Vesey St., New York, N. Y.
Transportation Section.—L. R. Knott, 59 E. Van Buren St., Chicago, Ill.
Fire Protection and Insurance Section. —W. F. Steffens, New York Central, Room 3317, 230 Park Avenue, New York, N. Y. Annual meeting, October 15-16, 1940, Congress Hotel, Chicago, Ill.
Freight Station Section.—L. R. Knott, 59 E. Van Buren St., Chicago, Ill.
Medical and Surgical Section.—J. C. Caviston, 30 Vesey St., New York N. Y.
Protective Section.—J. C. Caviston, 30 Vesey St., New York, N. Y.
Safety Section.—J. C. Caviston, 30 Vesey St., New York, N. Y.
Telegraph and Telephone Section.—W. A. Fairbanks, 30 Vesey St., New York, N. Y.
Engineering Division.—W. S. Lacher, 59 E. Van Buren St., Chicago, Ill. Annual meeting, March 11-13, 1941, Palmer House, Chicago, Ill.
Construction and Maintenance Section. —W. S. Lacher, 59 E. Van Buren St., Chicago, Ill. Annual meeting, March 11-13, 1941, Palmer House, Chicago, Ill.
Electrical Section.—W. S. Lacher, 59 E. Van Buren St., Chicago, Ill. Annual meeting, October 29, 1940, Hotel Sherman, Chicago, Ill.
Signal Section.—R. H. C. Balliet, 30 Vesey St., New York, N. Y.
Mechanical Division.—V. R. Hawthorne, 59 E. Van Buren St., Chicago, Ill.
Electrical Section.—J. A. Andreucetti, 59 E. Van Buren St., Chicago, Ill. Annual meeting, October 30, 1940, Hotel Sherman, Chicago, Ill.
Purchases and Stores Division.—W. J. Farrell, 30 Vesey St., New York, N. Y.
Freight Claim Division.—Lewis Pilcher, 59 E. Van Buren St., Chicago, Ill.
Motor Transport Division.—George M. Campbell, Transportation Bldg., Washington, D. C.
Car-Service Division.—E. W. Coughlin, Transportation Bldg., Washington, D. C.
Finance, Accounting, Taxation and Valuation Department.—E. H. Bunnell, Vice-President, Transportation Bldg., Washington, D. C.
Accounting Division. — E. R. Ford, Transportation Bldg., Washington, D. C. Annual meeting, 1941, Denver, Colo.
Treasury Division.—E. R. Ford, Transportation Bldg., Washington, D. C.
Traffic Department.—A. F. Cleveland, Vice-President, Transportation Bldg., Washington, D. C.

ASSOCIATION OF RAILWAY CLAIM AGENTS.—F. L. Johnson, Claim Agent, Alton R. R., 340 W.

Harrison St., Chicago, Ill. Annual meeting, 1941, Denver, Colo.

BRIDGE AND BUILDING SUPPLY MEN'S ASSOCIATION.—W. S. Carlisle, National Lead Company, 900 W. 18th St., Chicago, Ill. Meets with American Railway Bridge and Building Association.

CANADIAN RAILWAY CLUB.—C. R. Crook, 4415 Marcil Ave., N. D. G., Montreal, Que. Regular meetings, second Monday of each month except June, July and August, Windsor Hotel, Montreal, Que.

CAR DEPARTMENT ASSOCIATION OF ST. LOUIS, MO.—J. J. Sheehan, 1101 Missouri Pacific Bldg., St. Louis, Mo. Regular meetings, third Tuesday of each month, except June, July and August, Hotel De Soto, St. Louis, Mo.

CAR DEPARTMENT OFFICERS' ASSOCIATION.—Frank Kartheiser, Chief Clerk, Mechanical Dept., C. B. & Q., Chicago, Ill. Annual meeting, October 22-25, 1940, Hotel Sherman, Chicago, Ill.

CAR FOREMEN'S ASSOCIATION OF CHICAGO.—G. K. Oliver, 8238 So. Campbell Ave., Chicago, Ill. Regular meetings, second Monday of each month, except June, July and August, La Salle Hotel, Chicago, Ill.

CENTRAL RAILWAY CLUB OF BUFFALO.—Mrs. M. D. Reed, 1817 Hotel Statler, McKinley Square, Buffalo, N. Y. Regular meetings, second Thursday of each month, except June, July and August, Hotel Statler, Buffalo, N. Y.

EASTERN ASSOCIATION OF CAR SERVICE OFFICERS.—J. T. Bougher, 424 W. 33rd St. (11th floor), New York, N. Y.

INTERNATIONAL RAILWAY GENERAL FOREMEN'S ASSOCIATION (See Locomotive Maintenance Officers' Association).

INTERNATIONAL RAILWAY MASTER BLACKSMITHS' ASSOCIATION.—W. J. Mayer, Michigan Central R. R., Detroit, Mich.

LOCOMOTIVE MAINTENANCE OFFICERS' ASSOCIATION.—J. E. Goodwin, Gen. Foreman, Loco. Dept., Missouri Pacific R. R., No. Little Rock, (P. O. Little Rock), Ark. Annual meeting, October 22-25, 1940, Hotel Sherman, Chicago, Ill.

MASTER BOILER MAKERS' ASSOCIATION.—A. F. Stiglmeier, 29 Parkwood St., Albany, N. Y. Annual meeting, October 22-25, 1940, Hotel Sherman, Chicago, Ill.

NATIONAL ASSOCIATION OF RAILROAD AND UTILITIES COMMISSIONERS.—Clyde S. Bailey, New Post Office Bldg., Washington, D. C. Annual meeting, December 10-12, 1940, Miami, Fla.

NATIONAL RAILWAY APPLIANCES ASSOCIATION.—C. H. White, Room 1826, 208 S. La Salle St., Chicago, Ill.

NEW ENGLAND RAILROAD CLUB.—W. E. Cade, Jr., 683 Atlantic Ave., Boston, Mass. Regular meetings, second Tuesday of each month, except June, July, August and September, Hotel Touraine, Boston, Mass.

NEW YORK RAILROAD CLUB.—D. W. Pye, 30 Church St., New York, N. Y. Regular meetings, third Thursday of each month, except June, July, August September and December, 29 W. 39th St., New York, N. Y.

PACIFIC RAILWAY CLUB.—William S. Wollner, P. O. Box 3275, San Francisco, Cal. Regular meetings, second Thursday of each alternate month, at Palace Hotel, San Francisco, and second Friday of each alternate month at Hotel Hayward, Los Angeles.

RAILWAY BUSINESS ASSOCIATION.—P. H. Middleton, First National Bank Bldg., Chicago, Ill. Annual meeting, November 14, 1940, Hotel Commodore, New York, N. Y.

RAILWAY CLUB OF PITTSBURGH.—J. D. Conway, 1647 Oliver Bldg., Pittsburgh, Pa. Regular meetings, fourth Thursday of each month, except June, July and August, Fort Pitt Hotel, Pittsburgh, Pa.

RAILWAY ELECTRIC SUPPLY MANUFACTURERS' ASSOCIATION.—J. McC. Price, Allen-Bradley Company, 600 W. Jackson Blvd., Chicago, Ill.

RAILWAY FUEL AND TRAVELING ENGINEERS' ASSOCIATION.—T. Duff Smith, Room 811, Utilities Bldg., 327 S. La Salle St., Chicago, Ill. Annual meeting, October 22-25, 1940, Hotel Sherman, Chicago, Ill.

RAILWAY SUPPLY MANUFACTURERS' ASSOCIATION.—J. D. Conway, 1647 Oliver Bldg., Pittsburgh, Pa.

RAILWAY TELEGRAPH AND TELEPHONE APPLIANCE ASSOCIATION.—G. A. Nelson, Waterbury Battery Company, 30 Church St., New York, N. Y. Meets with Telegraph and Telephone Section of A. A. R.

RAILWAY TIE ASSOCIATION.—Roy M. Edmonds, 903 Syndicate Trust Bldg., St. Louis, Mo.

ROADMASTERS' AND MAINTENANCE OF WAY ASSOCIATION.—F. O. Whiteman, Room 332, Dearborn Station, Chicago, Ill.

SIGNAL APPLIANCE ASSOCIATION.—G. A. Nelson, Waterbury Battery Company, 30 Church St., New York, N. Y. Meets with A. A. R., Signal Section.

SOUTHERN AND SOUTHWESTERN RAILWAY CLUB.—A. T. Miller, 4 Hunter St., S. E. Atlanta, Ga. Regular meetings, third Thursday in January, March, May, July, September and November, Ansley Hotel, Atlanta, Ga.

SOUTHERN ASSOCIATION OF CAR SERVICE OFFICERS.—D. W. Brantley, C. of Ga. Ry., Savannah, Ga.

TORONTO RAILWAY CLUB.—D. M. George, P. O. Box 8, Terminal "A," Toronto, Ont. Regular meetings, fourth Monday of each month, except June, July and August, Royal York Hotel, Toronto, Ont.

TRACK SUPPLY ASSOCIATION.—Lewis Thomas Q. and C. Company, 59 E. Van Buren St., Chicago, Ill.

UNITED ASSOCIATIONS OF RAILROAD VETERANS.—Roy E. Collins, 112 Hatfield Place, Port Richmond, Staten Island, N. Y.

WESTERN RAILWAY CLUB.—W. L. Fox (Executive Secretary), Room 822, 310 South Michigan Ave., Chicago, Ill. Regular meetings, third Monday of each month, except June, July, August and September, Hotel Sherman, Chicago, Ill.

* * * *

New Haven Hostesses Beat Central Stewards in Radio Battle

These four New York, New Haven & Hartford dining-car hostesses were victorious over four New York Central dining-car stewards in a "Battle of the Sexes" program over National Radio Network recently by a score of 85 to 70. They are here pictured with Julia Sanderson and Frank Crummitt, directors of the program.

Equipment and Supplies

New York Central Spends $6,650,000 on Track Materials

The New York Central System has placed contracts for new rail and track accessories for 1941 delivery, amounting to approximately $6,650,000. The rail order, which aggregated approximately 71,000 tons, was divided among The Bethlehem Steel Company, Carnegie-Illinois Steel Corporation, Inland Steel Corporation and the Algoma Steel Corporation. Authorization for 65,000 tons was reported in the *Railway Age* of September 14, page 382.

Contracts for track accessories were divided among the following companies: American Fork & Hoe, Bethlehem Steel Company, Buffalo Bolt Company, Carnegie-Illinois Steel Corporation, Cleveland Frog & Crossing Co., Creepcheck Company, Inc., Illinois Malleable Iron Company, Inland Steel Company, Jones & Laughlin Steel Corp., Lamson & Sessions Co., Oliver Iron & Steel Corp., P. & M. Company, Pittsburgh Screw & Bolt Co., Rail Joint Company, Ramapo Ajax, Division of American Brake Shoe & Foundry Co., Republic Steel Corporation, Steel Company of Canada, Taylor-Wharton Iron & Steel Co., Weir Kilby Corporation, Weirton Steel Company, Wheeling Steel Corporation, Woodings Forge & Tool Co., and Youngstown Sheet & Tube Co.

Baltimore & Ohio—Correction

The Baltimore & Ohio advises that its board of directors has authorized purchase of 1,000 steel *gondola* cars and not 1,000 steel *hopper* cars, as was reported in the *Railway Age* of October 5, page 495.

LOCOMOTIVES

THE WHEELING & LAKE ERIE has ordered seven locomotives from the American Locomotive Company.

FREIGHT CARS

THE WHEELING & LAKE ERIE has ordered 500 50-ton box cars, placing 300 with the Pullman-Standard Car Manufacturing Company and 200 with the American Car & Foundry Company.

THE SEABOARD AIR LINE has received delivery from the Pullman-Standard Car Manufacturing Company of 50 hopper cars of 70-tons' capacity to be used in handling cement.

THE ST. LOUIS SOUTHWESTERN is inquiring for 400 freight cars, including 50 all-steel 70-ton rack cars, 50 70-ton gondola cars, 100 50-ton 50-ft. box cars and 200 50-ton 40-ft. box cars.

THE ERIE is inquiring for 1,200 freight cars, including 500 50-ton hopper cars, 300 50-ton box cars, 250 70-ton drop end gondola cars, 100 50-ton furniture cars and 50 70-ton flat cars. These are in addition to the 325 70-ton mill type gondola cars being constructed in company's Dunmore

shops as reported in the *Railway Age* of August 31, page 321.

THE ATCHISON, TOPEKA & SANTA FE is inquiring for 500, 1,000 or 2,000 box cars, 200 50-ton or 70-ton gondola cars, 200 50-ton or 70-ton hopper cars, 25 or 50 70-ton mill type gondola cars and 50 70-ton flat cars.

IRON AND STEEL

THE ERIE is expected to enter the market for 20,000 tons of rail.

THE SOUTHERN has ordered 35,000 tons of rail for delivery during the first half of 1941, of which 30,000 is placed with the Tennessee Coal, Iron & Railroad Co., and 5,000 with the Bethlehem Steel Company.

MOTOR VEHICLES

THE SOUTHEASTERN GREYHOUND LINES has received delivery of 24 29-passenger parlor-car type buses from the a. c. f. Motors Company.

Construction

CANADIAN NATIONAL.—A contract has been awarded the Piggott Construction Company, Saskatoon, Sask., for the addition of six stalls, each 110 ft. long, to the enginehouse at Nutana, Sask. The walls will be of solid brick construction with timber posts and roof beams. Doors of steel frame construction will be hung on steel door posts. The roof will consist of 2 in. by 3 in. laminated fir with a five-ply asphalt saturated felt and gravel covering.

CANADIAN NATIONAL.—A contract has been awarded A. W. Cassidy & Co., Ltd., Vancouver, B. C., for the construction of a stores building at Port Mann, B. C., 40 ft. by 198 ft. with a platform at one end 58 ft. by 96 ft. One section of the building 40 ft. by 36 ft. is two stories high constructed of reinforced concrete, with a basement below for oil tanks, etc., a pump room and petty stores room on the main floor and the district stores office on the second floor. The remainder of the building is of frame and stucco construction with concrete walls to the floor level. The building is supported on a pile foundation and the roof is supported by 40-ft. trusses. The roof over the office section will consist of asbestos felt, slate-covered shingles, and over the warehouse section of asbestos felt slate-covered rolled roofing.

THE CANADIAN NATIONAL.—A contract amounting to approximately $400,000 has been awarded the Winnipeg Supply & Fuel Company, Winnipeg, Man., for erection of a four-story, air-conditioned office building, 50 ft. by 175 ft., at Portage and Main streets, Winnipeg. The building will be of reinforced concrete construction, faced with Tyndall limestone on the street side and will be occupied by various departments of the Canadian National, including passenger and commercial ticket offices, telegraph and other departments.

CHICAGO, BURLINGTON & QUINCY.—A turntable 135 ft. long is being constructed at Clyde, Ill., to replace an existing turntable 100 ft. long. The work is being done by company forces and will cost approximately $45,000.

ERIE.—The New York Public Service Commission has approved a bid by C. B. Whitmore Company of Lockport, N. Y., in the amount of $138,050, covering the elimination of the Athol Springs crossing of this railroad in the town of Hamburg.

ILLINOIS CENTRAL.—A Red Devil engine coaler and automatic coal car unloader has been purchased, which will be erected at Duquoin, Ill.

MISSOURI PACIFIC.—The Central Yards, Inc., and the Missouri Pacific have awarded a contract, for a one-story terminal building in Kansas City, Mo., 24 ft. by 84 ft., with an unloading transfer shed and platform, to the S. Patti Construction Company, Kansas City. The building will be located near the foot of Grand avenue and will cost approximately $50,000.

NEW YORK, NEW HAVEN & HARTFORD.—A contract has been awarded the Ross and White Company, Chicago, for the furnishing and erection of complete sand handling equipment for sanding locomotives on four tracks, which will be installed at Midway, Conn.

NORFOLK & WESTERN.—This road announced on September 27 that it will spend $4,700,000 for additions and betterments to its yards at Roanoke, Va. Work on the project will begin immediately and is expected to require about two years for completion.

Major items included in the expenditures are: Laying of approximately 60 mi. of new tracks; straightening and improving the south end of the highway underpass at Shaffers crossing; grading to the extent of 1,500,000 cubic yards, and rearrangement of existing tracks.

Enlarged yard facilities will provide 20 additional tracks in the eastbound receiving yard, a 46-track classification yard, 8-track departure yard, 4-track equipment storage yard and a 10-track westbound empty yard. Other additions involve a new hump yard equipped with new scales for gravity switching near Shaffers crossing; supplementary engine terminal facilities, such as, ash hoists, engine washing platforms, engine inspection pits, and pneumatic tube system for transmitting reports from inbound engines to the roundhouse office.

A new humpmaster and weighing office, new re-icing station and other modern buildings; new floodlight towers and underpass at Shaffers crossing for employees complete the outline of work.

PENNSYLVANIA.—A contract has been awarded to J. & F. Harig Company, Cincinnati, Ohio, for the construction of a structural steel and brick warehouse and office building with loading dock in that city. The building will cost approximately $75,000.

Supply Trade

E. L. Ettenger has been appointed district representative of the **Union Railway Equipment Company,** with headquarters at Washington, D. C.

Neil H. Brown has been appointed district representative for the **Northern Equipment Company,** with headquarters at 1117 Liberty Life building, Charlotte, N. C.

W. L. Lentz has been appointed manager of the Schenectady plant of the **American Locomotive Company,** effective October 1, succeeding **R. P. Allison,** who has been appointed manager of the Alco plant at Richmond, Va.

R. G. McAndrew, superintendent motive power, New York, Ontario & Western, has been appointed technical assistant to the vice-presidents in charge of engineering and manufacturing, **American Locomotive Company,** with office at Schenectady, N. Y., effective October 1.

R. B. Stone, assistant to the manager of the railway division of **Peerless Manufacturing Corporation,** Louisville, Ky., has been appointed district representative for the Eastern division, with headquarters at Philadelphia, Pa., and has been succeeded by **J. S. Butler,** superintendent of the signal manufacturing division and sales and service engineer.

Dr. C. Guy Suits has been appointed assistant to the director of the research laboratory of the **General Electric Company.** Dr. Suits has been a member of the laboratory staff since 1930. He has received patents on railway block signal improvements, circuits for sequence flashing electric signs and numerous other devices.

H. J. Barton has been appointed to the Tool Steel division in the Southern California territory of the **Allegheny Ludlum Steel Corporation.** Mr. Barton has been associated with steel activities on the Pacific coast for many years and up to the time of his appointment with Allegheny Ludlum had served as an officer and sales manager of the Earle M. Jorgensen Company for 15 years and, prior to that, as branch manager of the Jamison Steel Company.

OBITUARY

Clyde M. Deardorff, sales engineer for Kerite Insulated Wire & Cable Company, with headquarters at Chicago, died on September 30. Mr. Deardorff entered the railroad field in 1905 in the signal department of the Union Pacific, and from 1910 to 1926 was employed in signal construction work and in commercial engineering and sales work for the General Railway Signal Company. Since 1926 he has been employed as sales engineer for the Kerite Insulated Wire & Cable Company.

Financial

ATCHISON, TOPEKA & SANTA FE.—*Bonds of the Pecos & Northern Texas.*—The Pecos & Northern Texas has been authorized by Division 4 of the Interstate Commerce Commission to extend from May 1, 1937, to July 1, 1958, the date of maturity of $11,984,000 of first mortgage, six per cent, gold bonds.

BOSTON & MAINE.—*Operation.*—Division 4 of the Interstate Commerce Commission has approved an agreement under which this company would be authorized to continue the operation of the Vermont Valley for a period of 10 years to and including July 1, 1960.

CENTRAL OF GEORGIA.—*Operation.*—This company has asked authority from the Interstate Commerce Commission to extend its operations over 5,900 ft. of tracks owned by the Birmingham Southern and to use certain freight house facilities and tracks leading thereto, to be constructed by the Birmingham Southern in Birmingham, Ala., 4,200 ft., a total of 10,100 ft.

CHICAGO GREAT WESTERN.—*R. F. C. Loan.*—This company has asked the Interstate Commerce Commission to approve a 10-year loan from the Reconstruction Finance Corporation in the sum of $6,396,870, the proceeds to be used to carry out the reorganization of this company under section 77 of the Bankruptcy Act. Provision for the loan was made in the final plan of reorganization for this company which has been approved by the commission and the federal district court.

ILLINOIS CENTRAL.—*R. F. C. Loan and Bonds.*—This company has asked the Interstate Commerce Commission to approve a $1,967,000 loan from the Reconstruction Finance Corporation, the funds to be used to pay off and retire $1,290,000 of Vicksburg, Shreveport & Pacific prior lien bonds, maturing November 1, 1940, and $677,000 of Vicksburg, Shreveport & Pacific general mortgage bonds maturing May 1, 1941. At the same time the company applied for authority to assume liability for $1,967,000 of its four per cent collateral trust bonds, due November 1, 1950, which would be taken by the R. F. C. as collateral security for the loan. Additional collateral for the loan would consist of $3,746,000 of Vicksburg, Shreveport & Pacific refunding and improvement mortgage 5s of 1973 which this company has asked the commission for authority to issue.

These bonds will be delivered to the Yazoo & Mississippi Valley in satisfaction of advances made by that company from June 2, 1926, to June 30, 1940, in the amount of $1,153,594, and for refunding the maturing prior lien and general mortgage bonds of the company. In its petition the Illinois Central stated that if the loan is approved, steps will be taken to close the Vicksburg refunding and improvement mortgage.

NEW YORK CENTRAL.—*Abandonment.*—This company has asked the Interstate Commerce Commission for authority to abandon a portion of its Fayette branch, extending from Morenci, Mich., to Fayette, Ohio, 6.6 miles.

NEW YORK CONNECTING.—*Bond Issue.*—Morgan Stanley & Co. and Kuhn, Loeb & Co. of New York, together with 63 associated firms, formally offered on October 4 an issue of $27,333,000, 3½ per cent First Mortgage, Series A, bonds due October 1, 1965, of this road. The issue is priced at 102 and accrued interest and was purchased from the issuing road at 100. Net proceeds from the sale will be applied toward redemption of a similar principal amount of outstanding first mortgage 4¼'s and 5's, due 1953, and callable at 105. The bonds under the new issue are unconditionally guaranteed as to principal, interest and sinking fund commitments by the Pennsylvania and New York, New Haven & Hartford, which exercise joint control over the Connecting.

PENNSYLVANIA-NEW YORK, NEW HAVEN & HARTFORD.—*Bonds of the New York Connecting.*—The New York Connecting has asked the Interstate Commerce Commission for authority to issue and sell $27,333,000 of first mortgage 3½ per cent bonds, due October 1, 1965, the net proceeds received from the sale, together with funds provided by the company, will be used for calling in, paying off and redeeming on or before February 1, 1941, the $27,333,000 of bonds now issued and outstanding under a first mortgage dated May 31, 1913. The bonds have been sold at 100 per cent plus accrued interest to the date of delivery to Kuhn, Loeb & Co. and Morgan, Stanley & Co., Inc., of New York.

At the same time the Pennsylvania and the New York, New Haven & Hartford asked the commission for authority to guarantee the principal and interest of the bonds and the sinking fund payments.

ST. LOUIS SOUTHWESTERN.—*Abandonment by the Stephenville North & South Texas.*—Acting on a protest of the city of Hamilton, Tex., the Interstate Commerce Commission has extended indefinitely the effective date of an order authorizing the Stephenville North & South Texas and the St. Louis Southwestern, respectively, to abandon a line and the operation of a line extending from Gatesville, Tex., to Hamilton, 32.7 miles.

SOUTHERN.—*Equipment Trust Certificates.*—Drexel & Co. and Laurence M. Marks & Co. offered on October 4 a $7,300,000 issue of 1⅞ per cent equipment trust certificates of this road, due at the rate of $730,000 annually 1941 to 1950, inclusive. The certificates are being offered at prices to yield from 0.35 to 2.20 and represent an average cost to the railroad of approximately 1.77.

SOUTHERN PACIFIC.—*Acquisition of the Waco, Beaumont, Trinity & Sabine.*—The Waco, Beaumont, Trinity & Sabine has asked the Interstate Commerce Commission to amend its order authorizing the Southern Pacific to acquire control of the St. Louis Southwestern by requiring the Southern Pacific to take over and acquire, under suitable guarantees as to title and freedom from debt, at a reasonable price, the line of the Waco company extending from Weldon, Tex., to Livingston, 41.6 miles. If the two companies cannot agree on a price, the Waco company asks the commission to hold hearings and determine what shall constitute a fair price for the road.

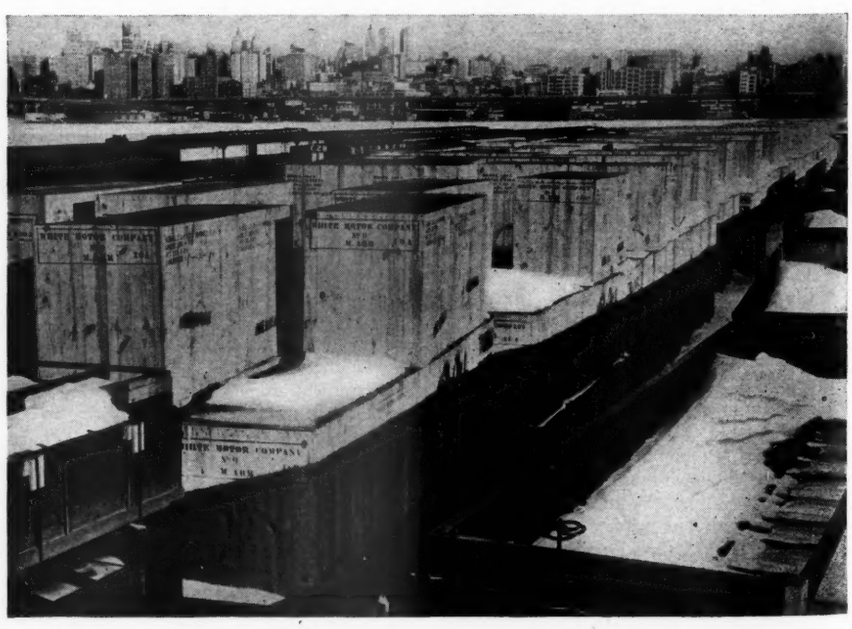
Average Prices of Stocks and Bonds

	Oct. 8	Last week	Last year
Average price of 20 representative railway stocks..	29.89	30.40	34.53
Average price of 20 representative railway bonds..	60.29	60.58	60.30

Dividends Declared

Wheeling & Lake Erie.—Prior Lien, $1.00, quarterly; Preferred, $1.37½ quarterly, both payable November 1 to holders of record October 24.

* * * *



The New Jersey Side of the Hudson River, Opposite New York, With War Materials Piled Up Awaiting Shipment to Europe

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"HOW CAN I HANDLE HEAVIER LOADS AT HIGHER SPEEDS?"

"THAT'S EASY, USE MODERN POWER"

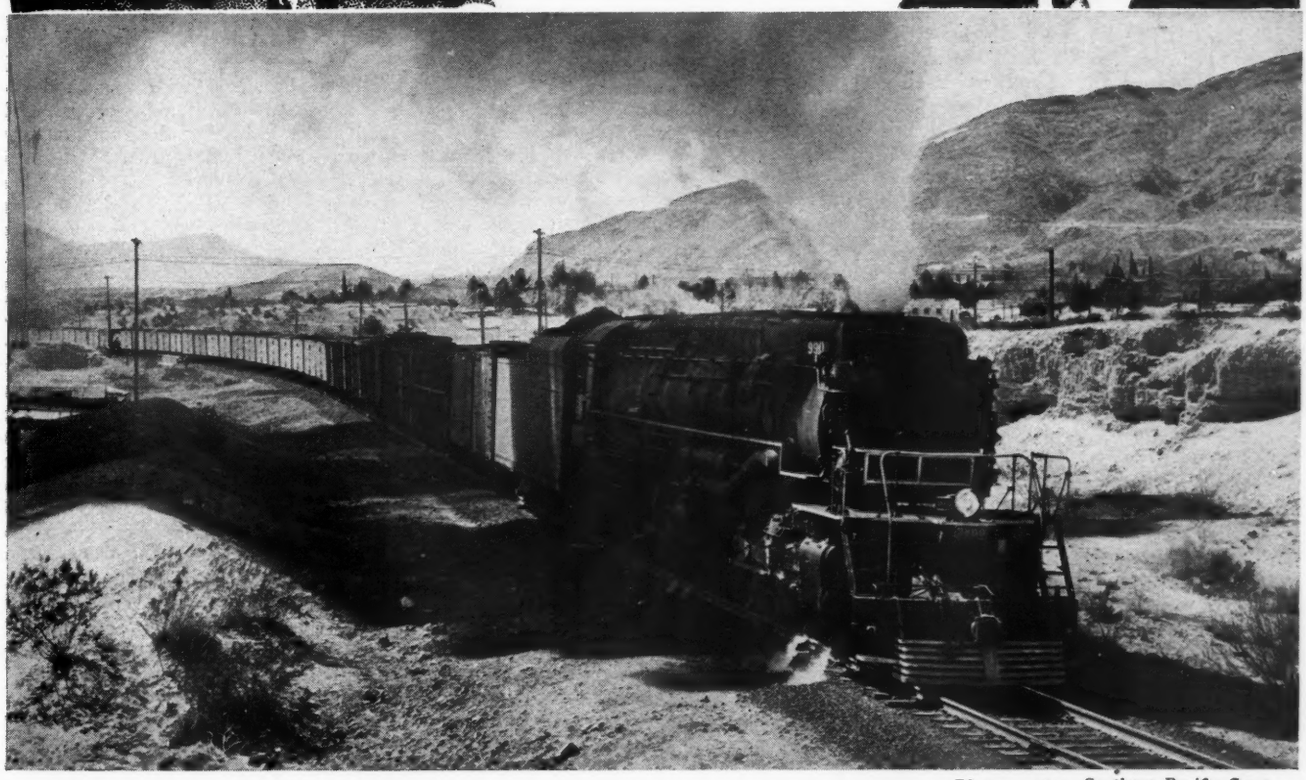

Photo courtesy Southern Pacific Company

This problem has been faced by all the railroads. Many of them have solved it by ordering Modern Power.

Lima is prepared to supply the railroads with the latest in Super Power Steam Locomotives.....locomotives designed to move heavy freight loads at passenger train speeds. Solve your transportation problem the progressive way.....order Modern Power.

LIMA LOCOMOTIVE WORKS LIMA LOCOMOTIVE WORKS INCORPORATED **INCORPORATED, LIMA, OHIO**

Railway Officers

EXECUTIVE

R. C. Parker, chief special agent of the Texas & Pacific, has been appointed assistant to the vice-president, operating department, in charge of the special agent department, with headquarters as before at Dallas, Tex., a change in title.

Edward Harris Maggard, president and general manager of the Northwestern Pacific and the Petaluma & Santa Rosa, with headquarters at San Francisco, Cal., retired on September 30. **A. T. Mercier,** vice-president on the Southern Pacific, with headquarters at San Francisco, has been elected also president of the Northwestern Pacific and the Petaluma & Santa Rosa, with the same headquarters, and **H. R. Gernreich,** superintendent of the Northwestern Pacific, has been elected vice-president and general manager of that road and of the Petaluma & Santa Rosa, with headquarters as before at Sausalito, Cal.

Mr. Maggard was born at Meridan, Miss., on August 19, 1875, and entered railway service in 1891, as a call boy on the Missouri-Kansas-Texas, later serving as a clerk in the freight office at Houston, Tex. In 1900, he went with the El Paso & Southwestern (now part of the Southern Pacific), as superintendent of terminals. In 1907, he went with the Petaluma & Santa Rosa as general freight agent, with headquarters at Petaluma, Cal. Mr. Maggard was later appointed vice-president and general manager, and in February, 1918, he was elected president and general manager, with the same headquarters. In February, 1928, he was elected also president and general manager of the Northwestern Pacific, with headquarters at San Francisco.

FINANCIAL, LEGAL AND ACCOUNTING

J. R. King, secretary of the board of pensions of the Chicago, Burlington & Quincy, with headquarters at Chicago, retired on October 1, after 46 years service.

J. S. Ott, auditor of the Chicago, Springfield & St. Louis, has been appointed auditor and treasurer, with headquarters as before at Springfield, Ill.

W. L. Crawford has been appointed auditor of the Trona Railway, with headquarters at Trona, Cal., succeeding **F. J. Knoeppel.**

C. J. E. Walsten has been appointed secretary of the Warren & Ouachita, with headquarters at Warren, Ark., succeeding **J. E. Hurley.**

R. A. Macdonald, chief clerk in the office of the regional treasurer of the Canadian National at Winnipeg, Man., has been promoted to paymaster of the Western region, with the same headquarters, succeeding **J. C. Hill,** whose retirement on September 30 was announced in the *Railway Age* of October 5.

J. J. Crane, assistant auditor of passenger and station accounts of the Illinois Central, has been promoted to auditor of passenger and station accounts, with headquarters as before at Chicago, succeeding **L. C. Esschen,** who has retired.

H. D. Jeffers has been appointed auditor of the Tennessee Railroad, with headquarters at Oneida, Tenn., succeeding **Sam A. Blair,** whose promotion to general manager was announced in the *Railway Age* of September 21.

A. E. Arneson, assistant secretary and assistant treasurer of the Duluth, Missabe & Iron Range, has been elected secretary and treasurer, with headquarters as before at Duluth, Minn., succeeding **J. W. Kempton,** who has retired.

L. W. McCoy, whose election as general auditor of the Bessemer & Lake Erie at Pittsburgh, Pa., was reported in the *Railway Age* of October 5, was born at Ashtabula, Ohio, on February 7, 1880, and

L. W. McCoy

entered railroad service on April 28, 1897, with the Bessemer & Lake Erie, with which road he has since remained. From February 1, 1905, to August 1, 1910, he served as traveling auditor, and from August, 1910, to January, 1919, he was chief clerk. Mr. McCoy served as assistant general auditor from January, 1919, until his recent election as general auditor.

OPERATING

W. M. Dutton, acting general manager of the Mississippi Export Railroad, has been appointed general manager, with headquarters as before at Moss Point, Miss.

W. R. Warner, assistant general manager of the Warren & Ouachita, has been appointed general manager, with headquarters as before at Warren, Ark., a change of title.

C. V. Berglund, assistant to the operating vice-president of the Northern Pacific, with headquarters at St. Paul, Minn., has been promoted to assistant general superintendent of transportation, a newly created position, with the same headquarters, and **Lowry Smith,** office engineer, with headquarters at St. Paul, has been promoted to assistant to the operating vice-president, succeeding Mr. Berglund. A biographical sketch of Mr. Berglund, accompanied by a photograph, was published in the *Railway Age* of March 23, page 571, following his promotion to assistant to the operating vice-president.

C. F. Heath, superintendent of the Steamer division of the Southern Pacific, has been appointed assistant superintendent of the Western division, with headquarters as before at Oakland Pier, Cal. The Steamer division has been abolished, and its operations will be conducted by the Western division.

G. M. de Lambert, division roadmaster on the Northern Pacific at Fargo, N. D., has been promoted to trainmaster-roadmaster at Mandan, N. D., succeeding **R. G. Knight,** who has been advanced to trainmaster at Billings, Mont. Mr. Knight replaces **W. C. Smith,** who has been transferred to Dickinson, N. D., relieving **W. L. Wood,** who has been moved to Staples, Minn., succeeding **J. F. Tracy,** who has retired.

Jacob A. Wagner, general manager of the Des Moines Union Railway, with headquarters at Des Moines, Iowa, has been granted a leave of absence, and will retire on January 1, 1941. Mr. Wagner was born in 1864 and entered railway service as an agent for the Chicago, Burlington & Quincy at Shenandoah, Iowa, being transferred later to Des Moines. In 1893, he went with the Des Moines Union, later being promoted to superintendent, and in October, 1918, to general manager.

John M. Budd, whose promotion to superintendent of the Klamath division of the Great Northern, with headquarters at Klamath Falls, Ore., was announced in the *Railway Age* of October 5, was born at Des Moines, Iowa, on November 2, 1907, and was graduated from the Sheffield Scientific School of Yale University in 1930. During the summers of 1926 and 1927, he worked on the Cascade division of the Great Northern and on November 11, 1930, following graduation, he became assistant electrical engineer for the Great Northern at St. Paul, Minn. In May, 1932, he returned to Yale, taking graduate work in the study of transportation and in July, 1933, he returned to the Great Northern as assistant trainmaster at Willmar, Minn. Mr. Budd was promoted to trainmaster at Willmar in July, 1934, and was later transferred successively to Sioux City, Iowa; Wenatchee, Wash., and Spokane. He was located at the latter point at the time of his recent promotion, which was effective October 1.

Patrick T. McCarthy, whose promotion to superintendent of the Washington division of the Union Pacific, with headquarters at Spokane, Wash., was announced in the *Railway Age* of October 5, was born at San Francisco, Cal., on June 22, 1896, and attended business college for several months. He entered railway service on February 9, 1914, as a messenger in the telegraph office of the Union Pacific at Portland, Ore., and two years later be-

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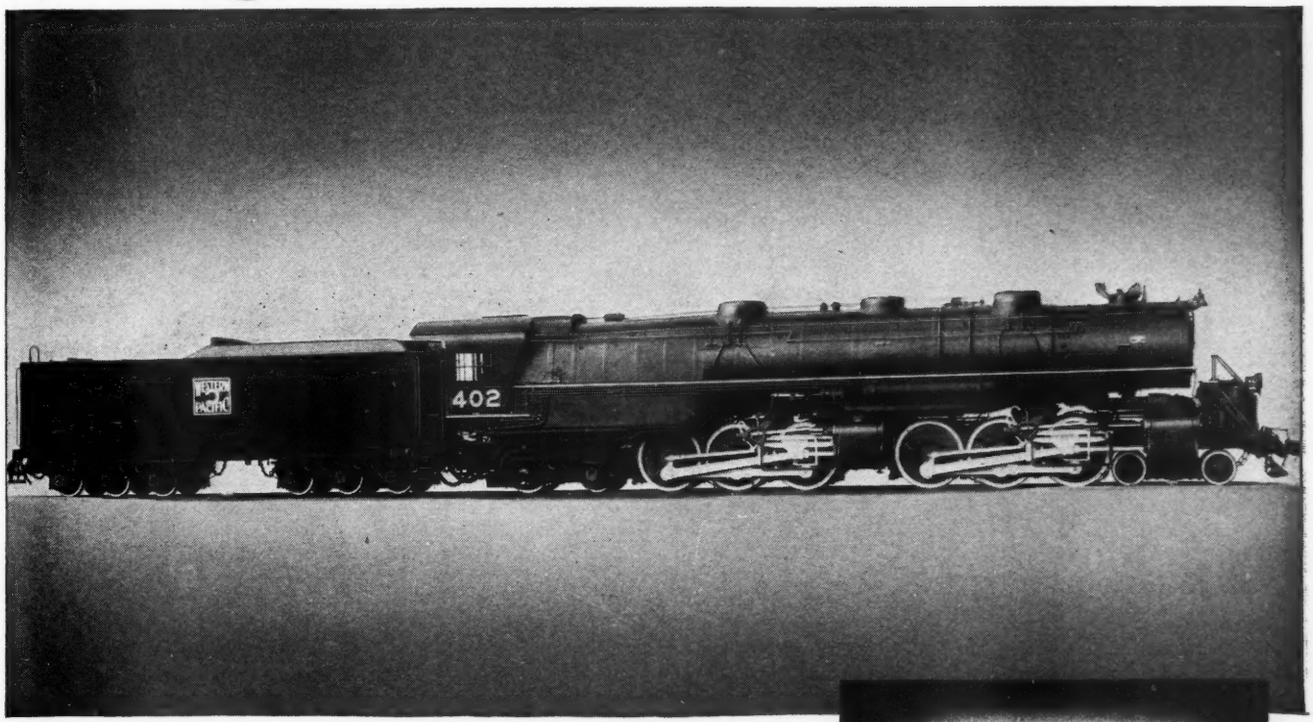
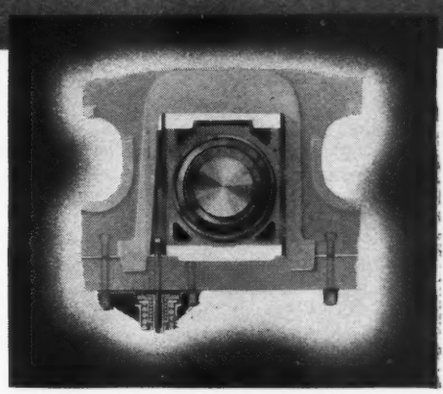
Protect your mallets...

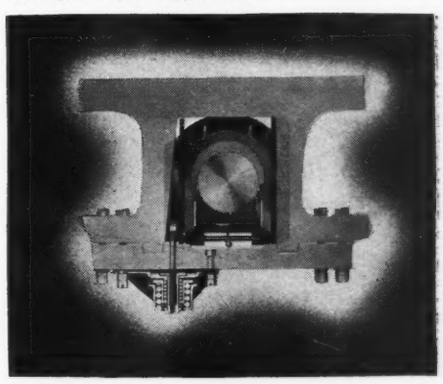


...WITH FRANKLIN AUTOMATIC COMPENSATORS AND SNUBBERS

Mallets, because of the large number of drivers, formerly meant multiplied troubles because of improperly adjusted driving box wedges. This condition no longer bothers the progressive railroads as they now keep their wedges adjusted automatically and correctly . . . with Franklin Automatic Compensators and Snubbers. » » » The Automatic Compensator and Snubber maintains a constant accurate adjustment. It compensates for wear and for quick changes in temperature, which in many cases varies as much as 250 degrees in short periods of time. Slack & Pound are eliminated and the destructive effect of abnormal shocks is prevented. » » » Wedge adjustment worry is a thing of the past, even on Mallets. Our engineers will be glad to consult with you on applying Franklin Automatic Compensators and Snubbers to your new or old power.



ABOVE: Franklin Automatic Compensator and Snubber for Roller Bearing Driving Box application. BELOW: Franklin Automatic Compensator and Snubber for Friction Bearing Driving Box application.



FRANKLIN RAILWAY SUPPLY COMPANY, INC.

NEW YORK
CHICAGO
MONTREAL

came a telegraph operator on the Oregon division. During the first World War he served in the U. S. Navy, returning to the

Patrick T. McCarthy

Union Pacific in 1919 as a train dispatcher on the Oregon division. Mr. McCarthy was promoted to train rules examiner in 1932, and to chief dispatcher at Spokane in 1934. Two years later he was advanced to assistant superintendent at Portland and in 1937 he was promoted to superintendent at Spokane. He was appointed chief dispatcher at Portland in 1939, and on June 16, 1940, he was appointed acting superintendent at Spokane. Mr. McCarthy's promotion to superintendent was effective September 16.

TRAFFIC

F. A. Bauchens, assistant general passenger agent of the Pennsylvania at St. Louis, Mo., has retired.

G. W. Frank, general traffic agent on the Southern at Chattanooga, Tenn., has been promoted to assistant freight traffic manager, with the same headquarters, a change of title.

W. J. Siering, chief clerk to the general freight traffic manager of the Missouri Pacific at St. Louis, Mo., has been promoted to general agent at Seattle, Wash., succeeding **C. M. Fowler,** who retired on October 1.

J. G. Simpson, assistant general freight agent on the Denver & Rio Grande Western, has been appointed assistant to the Freight traffic manager, with headquarters as before at Denver, Colo., a change of title.

A. T. Ridley, general agent on the Nashville, Chattanooga & St. Louis at Knoxville, Tenn., has been appointed general eastern agent at New York, succeeding **P. E. Gross,** who in turn has been appointed general agent at Knoxville replacing Mr. Ridley.

Dale E. Gilbert, whose promotion to assistant freight traffic manager on the Wabash, with headquarters at Detroit, Mich., was announced in the *Railway Age* of October 5, was born at Attica, Ind., on November 17, 1887, and entered railway service on the Wabash in 1905 as a clerk at Attica. Two years later he was transferred to the local freight office at Toledo, Ohio, and in 1909 he was promoted to chief clerk at Pittsburgh, Pa., later being appointed contracting agent and traveling freight agent at that point. Mr. Gilbert was advanced to general agent at Cleveland, Ohio, in 1912, to division freight agent at Toledo in 1915, and to assistant general freight agent at Toledo in 1928, holding the latter position until his recent promotion, which was effective October 1.

R. F. Kelaher, traveling freight agent for the Chicago, Milwaukee, St. Paul & Pacific at New York, has been promoted to general agent at Buffalo, N. Y., succeeding **R. F. Trumper,** who has retired. **J. D. Wohlenberg** has been appointed general agent at Sioux Falls, S. D., relieving **W. D. Griffiths.**

A. S. Eaton, traveling freight and passenger agent for the Denver & Rio Grande Western at Cincinnati, Ohio, has been promoted to general agent at Cleveland, Ohio, a newly created position, and **J. M. Higgins,** traveling freight and passenger agent at Chicago, has been advanced to general agent at Minneapolis, Minn., also a newly created position.

O. R. Smith, assistant general freight agent on the St. Louis Southwestern at Tyler, Tex., has been promoted to general freight agent, with the same headquarters, succeeding **S. F. Baker,** whose death on August 6 was announced in the *Railway Age* of September 7. The position of assistant general freight agent at Tyler has been abolished.

J. E. Payne, assistant to the general traffic manager of the St. Louis-San Francisco, with headquarters at St. Louis, Mo., has been promoted to assistant freight traffic manager, with the same headquarters. **Andrew L. Kreamelmeyer,** general freight agent at St. Louis, has been advanced to assistant to the general traffic manager, succeeding Mr. Payne and **S. C. Inkley,** assistant general freight agent at St. Louis, has been promoted to general freight agent, replacing Mr. Kreamelmeyer. **C. L. Redden,** assistant general freight agent at St. Louis, has been appointed special representative, with the same headquarters. **M. N. Lallinger,** a clerk in the rate department at St. Louis, and **L. R. Hall,** a clerk in the commerce department, have been promoted to assistant general freight agents at St. Louis. **M. L. Austin,** industrial agent at St. Louis, has been advanced to industrial commissioner, a change in title. **W. H. Crow,** division freight and passenger agent at Pensacola, Fla., has been promoted to assistant traffic manager, with the same headquarters. A biographical sketch and photograph of Mr. Payne were published in the *Railway Age* of July 6, page 56, following his recent promotion to assistant to the general traffic manager.

ENGINEERING AND SIGNALING

H. R. Peterson, assistant engineer on the Northern Pacific at St. Paul, Minn., has been promoted to office engineer, with the same headquarters, succeeding **Lowry Smith,** whose promotion to assistant to the operating vice-president, with headquarters at St. Paul, is announced elsewhere in these columns.

A. J. Witchel, assistant superintendent in charge of engineering of the Spokane, Portland & Seattle, has been appointed chief engineer, with headquarters as before at Portland, Ore., a change of title.

J. M. Fox, whose appointment as engineer maintenance of way of the Eastern Pennsylvania division of the Pennsylvania at Harrisburg, Pa., was noted in the *Railway Age* of October 5, was born in Bucks County, Pa., in 1892. He was graduated from Princeton University in 1915 in civil engineering and began railroad work in July of that year as a chainman on the Baltimore division of the Pennsylvania. After serving in various capacities on several divisions, Mr. Fox was assigned to the office of the chief electrical engineer at Philadelphia in 1935. He became division engineer of the New York division at Jersey City, N. J., on February 1, 1938, the position he held until his recent appointment as engineer maintenance of way of the Eastern Pennsylvania division.

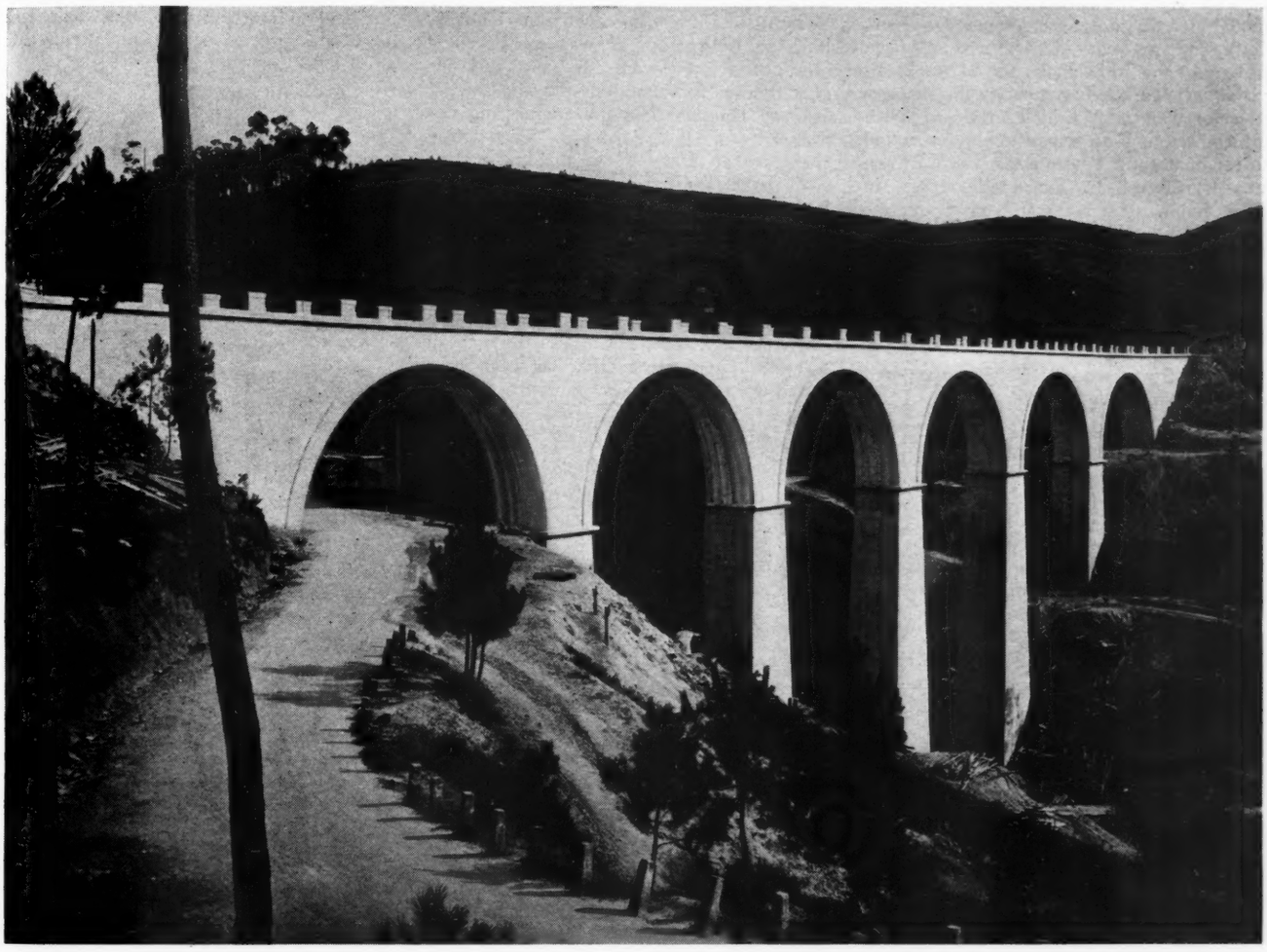
J. M. Fox

Thomas Webb Brown, whose promotion to district maintenance engineer on the Chicago, Rock Island & Pacific, with headquarters at Des Moines, Iowa, was announced in the *Railway Age* of August 24, was born at Edgerton, Mo., on October 1, 1878, and entered railway service on the

Thomas Webb Brown

Continued on next left-hand page

NO. 129 OF A SERIES OF FAMOUS ARCHES OF THE WORLD



MATAMA VIADUCT
PORTUGAL

The Matama Viaduct, Vale do Tamega Railway, is one of the many imposing masonry structures on the Portugese Railway known as the Companhia dos Caminhos de Ferro Portugueses. The 637 ft. viaduct, which was constructed in 1936, carries a single-track railway, steam-operated. The viaduct consists of six arches, each of 66 ft. span with a height in the center of 153 ft. » » » The Security Sectional Arch for the locomotive firebox was designed and developed to further the economy and effectiveness of the steam locomotive. Only when your locomotive has a complete arch can you realize true combustion efficiency. Get the utmost from your locomotive . . . check the arch before it leaves the roundhouse.

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Refractory Specialists

AMERICAN ARCH CO.
INCORPORATED
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Locomotive Combustion Specialists

Rock Island in 1892 as a section laborer at Rose Hill, Iowa. In 1899, he was promoted to section foreman at Brighton, Iowa, and two years later he was advanced to extra gang foreman on the Missouri division, serving in that capacity and as section foreman at Washington, Iowa, until December 26, 1911, when he was promoted to roadmaster at Washington. Mr. Brown was transferred to Estherville, Iowa, in 1913, and was later transferred to Centerville, Iowa; Trenton, Mo.; and Des Moines, Iowa, being located at the latter point at the time of his recent promotion.

MECHANICAL

C. N. Swartwood has been appointed shop superintendent of the Erie at Dunmore, Pa.

Charles Green has been appointed assistant master mechanic on the Western division of the Southern Pacific, with headquarters at West Oakland, Cal.

Otto C. Gruenberg, whose appointment as superintendent of motive power of the New York, Ontario & Western and the New York, Susquehanna & Western at Middletown, N. Y., was reported in the *Railway Age* of September 21, was born on August 1, 1897, at Gary, Ind. Mr. Gruenberg was graduated from Tri-State College in 1921 with a degree in mechanical engineering and from Harvard Sum-

Otto C. Gruenberg

mer School in 1930 in railroad transportation. From July, 1921, to May, 1922, he was department foreman of the American Sheet & Tin Plate Company at Gary, Ind., and from the latter date until July, 1925, he served as special apprentice on the Chicago, Milwaukee, St. Paul & Pacific at Milwaukee, Wis., and Austin, Minn. Mr. Gruenberg became draftsman on the Chicago, Milwaukee, St. Paul & Pacific at Milwaukee in July, 1925, which position he held until March, 1926, when he became engine house foreman for the same road at Sioux City, Iowa. In November, 1926, he was appointed dynamometer car engineer on the same road, going with the Boston & Maine in March, 1927, as general foreman at Springfield, Mass. From June, 1929, to May, 1933, Mr. Gruenberg served as special engineer on research work for the Boston & Maine at Boston, Mass., becoming shop foreman at Mechanicville, N. Y., on the latter date. From January, 1935, to June, 1936, he was special engineer conducting locomotive tests and engine house foreman on the Boston & Maine. He served in the engineering department of the American Locomotive Company at New York, making motive power studies, from June, 1936, to October 1, 1940, when he was appointed superintendent of motive power of the New York, Ontario & Western and the New York, Susquehanna & Western.

N. J. Bricher, general foreman of the car department on the Chicago, Burlington & Quincy at Aurora, Ill., has been promoted to superintendent of shops at that point, succeeding **H. C. Gugler,** whose death on September 20 is announced elsewhere in these columns.

Frank Kenneth Mitchell, assistant superintendent of equipment on the Cleveland, Cincinnati, Chicago & St. Louis, with headquarters at Indianapolis, Ind., has been appointed assistant to general superintendent of motive power on the New York Central system, with jurisdiction over locomotive shops and Elkhart Foundry operations, with headquarters at New York.

PURCHASES AND STORES

Edward G. Walker, whose retirement on October 31, as assistant general purchasing agent of the Atchison, Topeka & Santa Fe, with headquarters at Chicago, was announced in the *Railway Age* of September 28, was born on a farm near Howe, Ind., on October 5, 1870. He graduated from the Goshen (Ind.) High School in 1887 and for several years taught school and studied law, being admitted to the bar at Goshen in 1893. In 1894 he returned to his farm and in 1898 he entered railway service in the stores department of the Lake Shore & Michigan Southern (now a part of the Michigan Central) at Elkhart, Ind. He remained at this point until 1903, when he entered the stores department of the Santa Fe in a clerical capacity at Albuquerque, N. M. Mr. Walker served for a short time in 1904 on the Chicago, Rock Island & Pacific at Moline, Ill., and in 1905 he returned to the Santa Fe at Topeka and was then transferred to Chicago, being promoted to assistant chief clerk of the purchasing department in 1910. In November, 1913, he was promoted to chief clerk, and on December 1, 1926, he was advanced to assistant general purchasing agent, with headquarters at Chicago.

William Smith Riach, whose promotion to assistant general purchasing agent of the Atchison, Topeka & Santa Fe, with headquarters at Chicago, was announced in the *Railway Age* of September 28, was born at Topeka, Kan., on June 15, 1887, and attended business college and the Railroad Y. M. C. A. night school. He entered railway service on January 11, 1903, as an office boy in the store department of the Santa Fe at Topeka and all his service until his recent promotion has been in the store department at that point. On March 10, 1904, he became a clerk and a year later a stenographer. On December 1, 1909, he was promoted to secretary to the general storekeeper and a year later he was appointed statistical clerk. Mr.

William Smith Riach

Riach was advanced to assistant chief clerk on April 1, 1917, and on November 16, 1918, he was further advanced to chief clerk, the position he held until his recent promotion, which was effective October 1.

OBITUARY

H. C. Gugler, superintendent of shops on the Chicago, Burlington & Quincy at Aurora, Ill., died at that point on September 20.

Joseph E. Weaver, assistant general passenger agent on the Baltimore & Ohio, with headquarters at Chicago, died on October 8 at the St. Francis hospital, Evanston, Ill.

W. F. Dickinson, general solicitor of the Chicago, Rock Island & Pacific, with headquarters at Chicago, died in that city on October 8, following an illness of several weeks.

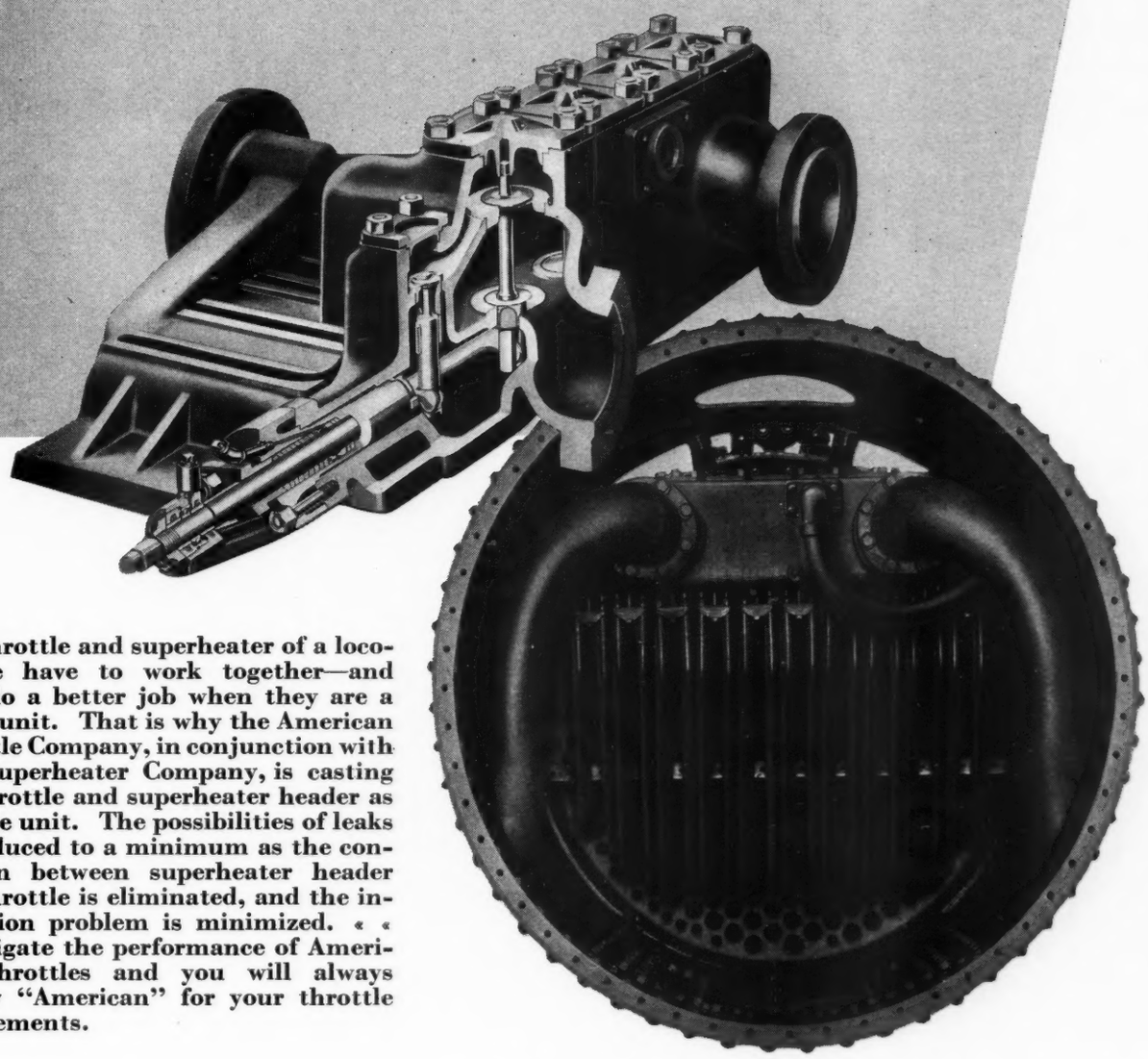
Harry W. Forman, author of "Rights of Trains," a classic of the railroad world, who retired on May 1, 1937, as assistant to the general manager in charge of rules, wages and working conditions of the Western Pacific, died on September 8 at Menlo Park, Cal. Mr. Forman was born in Doniphan, Kan., on August 1, 1858, and at the age of 15 learned telegraphy. In 1873, he entered the service of the Chicago, Burlington & Quincy and later became a dispatcher for the Denver & Rio Grande Western. Subsequently he became train rules examiner, first for the Union Pacific, and then for the Colorado & Southern. In 1905 he entered the employ of the Nashville, Chattanooga & St. Louis, to write its book of rules. In 1916, Mr. Forman entered the service of the Western Pacific and eventually was promoted to the position of assistant to the general manager in charge of rules, wages and working conditions, with headquarters at San Francisco, Cal., the position he held until his retirement. Mr. Forman was an authority on train and operating rules and, besides being the author of "Rights of Trains," was a contributor on various occasions to the columns of the *Railway Age.*

Table of Revenues and Expenses begins on next left-hand page

BUY YOUR THROTTLES

integral with YOUR SUPERHEATERS

NOT *in addition to*



The throttle and superheater of a locomotive have to work together—and they do a better job when they are a single unit. That is why the American Throttle Company, in conjunction with The Superheater Company, is casting the throttle and superheater header as a single unit. The possibilities of leaks are reduced to a minimum as the connection between superheater header and throttle is eliminated, and the installation problem is minimized. « « Investigate the performance of American throttles and you will always specify "American" for your throttle requirements.

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REVENUES AND EXPENSES OF RAILWAYS

MONTH OF AUGUST AND EIGHT MONTHS OF CALENDAR YEAR 1940

Name of road		Av. mileage operated during period	Operating revenues: Freight	Passenger	Total (inc. misc.)	Operating expenses: Maintenance of Way and structures	Maintenance of Equipment	Traffic	Transportation	Total	Operating ratio	Net from railway operation	Operating income	Net railway operating income 1940	Net railway operating income 1939
Akron, Canton & Youngstown	Aug.	171	$202,857	$51	$211,159	$31,512	$19,229	$13,981	$57,679	$132,640	62.8	$78,519	$59,384	$45,847	$28,537
	8 mos.	171	1,443,956	277	1,508,923	214,859	167,986	111,563	454,964	1,025,243	67.9	483,680	361,517	270,110	125,720
Alton	Aug.	959	994,865	224,601	1,414,067	325,129	215,213	48,914	559,265	1,217,261	86.1	196,806	89,861	—94,933	109,868
	8 mos.	959	7,371,846	1,697,355	10,578,003	1,673,817	1,772,653	371,293	4,395,357	8,781,430	83.0	1,796,573	1,068,022	—276,315	203,768
Atchison, Topeka & Santa Fe System	Aug.	13,414	11,282,815	2,135,387	14,631,685	2,199,966	2,965,423	483,492	4,900,951	10,896,779	74.5	3,734,906	2,175,460	2,253,419	1,982,951
	8 mos.	13,416	85,950,438	12,341,606	107,501,072	16,670,969	23,774,158	3,783,566	38,197,834	85,276,350	79.3	22,224,722	11,438,124	11,686,640	10,086,108
Atlanta & West Point	Aug.	93	118,295	26,288	164,911	20,553	25,638	8,450	66,023	130,658	79.2	34,253	22,483	11,306	—7,637
	8 mos.	93	864,910	192,794	1,231,016	173,438	215,731	68,407	522,355	1,063,942	86.4	167,074	72,917	—21,765	—58,867
Western of Alabama	Aug.	133	113,152	25,261	154,355	15,121	28,351	7,872	57,575	118,164	76.6	36,191	13,874	18,740	4,748
	8 mos.	133	844,281	189,186	1,163,596	153,555	239,292	64,881	455,820	988,088	84.9	175,508	65,464	87,152	43,057
Atlanta, Birmingham & Coast	Aug.	639	245,746	8,638	272,447	48,673	54,023	23,953	117,776	260,360	95.6	12,087	—13,203	—28,672	—24,347
	8 mos.	639	1,938,714	193,606	2,299,855	387,572	409,880	191,132	974,328	2,105,339	91.5	194,516	—11,496	—186,159	—68,820
Atlantic Coast Line	Aug.	5,100	2,637,075	407,318	3,394,825	513,311	813,134	148,495	1,493,171	3,134,690	92.3	260,135	85,135	44,749	—74,730
	8 mos.	5,101	23,594,892	5,916,088	32,812,141	3,634,743	6,876,612	1,268,046	13,431,639	26,818,380	81.7	5,993,761	2,693,761	1,000,611	2,475,194
Charleston & Western Carolina	Aug.	343	192,529	2,251	199,544	29,949	34,501	9,366	65,862	146,388	73.4	53,156	—11,557	30,667	43,212
	8 mos.	343	1,703,804	11,803	1,750,835	229,014	333,081	73,646	565,438	1,249,006	71.3	501,829	—132,272	318,829	285,016	333,035
Baltimore & Ohio	Aug.	6,380	14,423,963	1,017,054	16,364,054	1,672,463	3,649,090	422,597	5,278,934	11,643,676	71.2	4,720,378	3,737,047	3,326,319	2,770,004
	8 mos.	6,381	101,419,385	6,699,777	114,787,311	11,032,754	25,940,507	3,308,659	40,709,057	86,260,738	75.2	28,526,573	20,873,359	17,911,613	12,746,063
Staten Island Rapid Transit	Aug.	24	58,130	70,833	139,390	12,107	26,031	937	76,116	126,207	90.5	13,182	—11,557	—18,362	—10,911
	8 mos.	24	453,990	542,543	1,063,294	83,025	193,254	8,716	614,743	990,835	93.2	72,459	—132,272	—178,910	—192,820
Bangor & Aroostook	Aug.	603	215,156	14,039	246,177	101,262	86,198	4,634	90,247	303,613	123.3	—57,436	—67,535	—41,278	—81,177
	8 mos.	603	3,342,254	116,989	3,591,594	738,993	660,441	40,251	961,731	2,586,580	72.0	1,005,014	657,074	702,621	707,621
Bessemer & Lake Erie	Aug.	224	2,218,524	775	2,227,813	126,484	337,891	12,025	267,864	778,054	34.9	1,449,759	1,087,664	1,139,663	764,046
	8 mos.	224	10,931,060	5,108	11,004,437	908,508	2,500,768	99,584	1,699,944	5,473,415	49.7	5,531,022	3,967,728	4,345,852	2,033,631
Boston & Maine	Aug.	1,910	2,706,824	745,377	3,940,080	515,911	589,947	64,705	1,510,259	2,835,825	72.0	1,104,255	804,216	592,209	713,387
	8 mos.	1,910	22,255,468	4,694,190	30,865,309	4,032,519	4,630,105	513,927	12,271,628	22,689,127	73.5	8,176,182	5,767,671	3,989,280	3,720,087
Burlington, Rock Island	Aug.	255	84,491	22,844	115,114	16,349	17,046	4,930	45,659	93,696	81.4	21,418	11,474	6,971	—9,099
	8 mos.	255	599,223	153,974	816,246	132,165	142,714	36,085	396,734	787,835	96.5	28,411	—53,227	—97,733	—80,282
Cambria & Indiana	Aug.	37	134,417	.....	134,518	12,787	59,517	380	13,013	91,177	67.78	43,341	10,709	80,524	76,691
	8 mos.	37	992,597	19,296	993,348	71,534	421,499	3,489	101,118	642,623	64.69	350,725	93,891	623,383	572,539
Canadian Pacific Lines in Maine	Aug.	234	108,526	22,844	147,510	40,689	35,757	6,372	55,775	144,899	98.2	2,611	—7,754	—20,915	—49,287
	8 mos.	234	1,841,697	114,718	2,076,812	289,106	359,453	54,265	669,999	1,418,778	68.3	658,034	569,679	405,268	41,668
Canadian Pacific Lines in Vermont	Aug.	91	81,974	8,140	99,585	12,787	20,300	2,310	62,213	101,288	101.7	—1,703	—9,637	—32,861	—65,344
	8 mos.	91	657,223	62,009	803,368	122,078	196,583	19,559	524,425	885,667	110.2	—82,299	—142,248	—309,753	—419,847
Central of Georgia	Aug.	1,863	1,054,963	118,622	1,298,418	193,370	293,748	52,336	574,583	1,186,712	91.4	111,706	—5,776	—3,775	—16,956
	8 mos.	1,865	8,586,570	873,551	10,618,324	1,493,187	2,212,809	432,321	4,706,318	9,462,291	89.1	1,156,033	181,553	21,900	135,580
Central of New Jersey	Aug.	710	2,422,517	439,239	3,070,462	332,702	693,554	50,058	1,202,390	2,392,974	77.9	677,488	210,411	58,503	111,020
	8 mos.	710	18,979,605	2,850,914	23,347,824	2,132,973	5,125,726	389,383	9,495,504	17,964,948	76.9	5,382,876	2,008,213	656,804	342,334
Central Vermont	Aug.	422	453,618	52,115	542,773	95,581	78,618	12,361	211,720	418,012	77.0	124,761	99,185	62,402	14,218
	8 mos.	422	3,725,437	244,281	4,274,328	608,063	663,155	95,038	1,796,683	3,314,900	77.6	959,428	763,956	453,408	34,777
Chesapeake & Ohio	Aug.	3,115	11,586,588	320,547	12,373,710	1,059,357	2,105,919	200,433	2,650,097	6,314,871	51.0	6,058,839	4,306,786	4,319,784	4,081,327
	8 mos.	3,115	84,074,549	2,150,109	89,472,371	8,216,830	16,646,739	1,674,844	20,720,088	49,718,917	55.6	39,753,454	27,673,143	27,878,771	18,299,759
Chicago & Eastern Illinois	Aug.	925	1,031,516	145,848	1,327,970	164,737	225,642	52,541	492,463	995,730	75.0	332,240	252,240	132,849	22,488
	8 mos.	925	7,842,149	1,031,664	10,073,830	1,261,332	1,864,157	449,706	4,103,299	8,184,404	81.2	1,889,426	1,201,426	192,677	59,213
Chicago & Illinois Midland	Aug.	131	414,005	774	442,751	71,655	68,007	19,170	97,598	275,647	62.3	167,104	94,217	90,680	67,304
	8 mos.	131	2,789,172	5,107	2,968,195	403,889	528,138	161,507	727,905	1,977,749	66.6	990,446	743,857	723,886	486,650
Chicago & North Western	Aug.	8,322	6,854,594	1,301,759	9,009,780	1,258,893	1,615,197	184,761	3,120,579	6,515,898	72.3	2,493,882	1,906,320	1,613,728	1,132,300
	8 mo.	8,325	44,434,557	7,834,686	58,539,188	8,587,730	11,922,188	1,523,926	23,538,840	48,154,379	82.3	10,384,809	5,666,654	3,759,238	28,235
Chicago, Burlington & Quincy	Aug.	8,958	6,459,650	1,095,273	8,430,325	1,450,520	1,330,679	232,209	2,891,383	6,197,766	73.5	2,232,559	1,459,817	1,126,181	816,103
	8 mos.	8,981	48,497,548	5,921,138	61,043,587	9,303,364	11,112,031	1,995,316	22,944,888	47,717,759	78.2	13,325,828	7,211,993	4,758,923	4,493,491
Chicago Great Western	Aug.	1,502	1,364,270	57,430	1,536,479	207,725	251,158	58,142	566,114	1,131,967	73.7	404,512	317,052	125,040	207,056
	8 mos.	1,502	10,374,322	322,499	11,539,186	1,599,549	1,928,585	470,665	4,454,581	8,861,028	76.8	2,678,158	1,924,752	465,219	659,355
Chicago, Indianapolis & Louisville	Aug.	549	680,379	44,801	796,068	89,749	132,226	25,976	277,605	556,149	69.9	239,919	197,300	106,149	61,154
	8 mos.	549	5,286,700	321,017	6,172,500	588,774	1,020,180	222,322	2,274,722	4,378,132	70.9	1,794,368	1,455,276	706,640	—270,201

Continued on next left-hand page

On the Best Revenue Producers

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REVENUES AND EXPENSES OF RAILWAYS

MONTH OF AUGUST AND EIGHT MONTHS OF CALENDAR YEAR 1940—CONTINUED

Name of road		Av. mileage operated during period	Operating revenues: Freight	Passenger	Total (inc. misc.)	Operating expenses: Maintenance of Way and structures	Maintenance of Equipment	Traffic	Transportation	Total	Operating ratio	Net from railway operation	Operating income	Net railway operating income 1940	Net railway operating income 1939
Chicago, Milwaukee, St. Paul & Pacific	Aug.	10,882	$8,853,294	$937,540	$10,805,082	$1,908,729	$1,735,378	$236,395	$3,502,094	$7,782,262	72.0	$3,022,820	$2,257,820	$1,865,588	$1,028,738
	8 mos.	10,883	59,904,422	5,274,947	72,292,306	12,688,256	13,599,573	1,850,403	26,902,524	57,998,407	80.2	14,293,899	8,555,899	5,371,854	1,242,125
Chicago, Rock Island & Pacific	Aug.	7,900	5,361,994	766,203	6,707,551	1,213,712	1,246,825	250,995	2,445,083	5,413,421	80.7	1,294,130	812,598	395,690	112,588
	8 mos.	7,892	42,336,713	5,337,702	52,301,069	7,575,865	9,711,279	2,064,663	19,850,699	41,544,440	79.4	10,756,629	6,864,603	3,592,166	2,258,975
Chicago, St. Paul, Minneapolis & Omaha	Aug.	1,629	1,487,422	175,170	1,773,966	264,832	274,419	38,393	720,938	1,363,102	76.8	410,864	290,923	168,304	202,875
	8 mos.	1,629	9,529,187	1,061,821	11,351,001	1,683,256	2,058,603	314,189	5,285,156	9,877,220	87.0	1,473,781	553,573	—337,255	—647,487
Clinchfield Railroad	Aug.	308	597,159	3,844	606,920	98,314	119,600	19,236	119,131	375,401	61.9	231,519	159,562	181,459	295,223
	8 mos.	308	5,607,509	29,063	5,681,487	414,914	968,325	154,828	1,048,864	2,717,492	47.8	2,963,995	2,254,260	2,403,994	1,918,557
Colorado & Southern	Aug.	786	450,010	64,147	567,591	103,729	104,736	14,576	215,377	465,922	82.1	101,669	23,043	2,586	74,766
	8 mos.	786	3,463,016	268,670	4,125,834	792,686	830,595	113,551	1,662,301	3,617,163	87.7	508,671	—34,690	—186,971	154,333
Fort Worth & Denver City	Aug.	902	385,863	76,367	458,899	50,869	60,615	30,458	159,212	334,488	72.9	124,411	87,516	49,596	50,391
	8 mos.	902	3,554,562	410,040	3,906,001	469,984	614,189	165,439	1,341,471	2,835,252	72.6	1,070,749	769,606	504,957	426,120
Columbus & Greenville	Aug.	168	83,378	4,618	92,953	10,262	13,048	4,584	32,831	70,773	76.1	22,180	12,850	15,473	3,679
	8 mos.	168	674,091	35,792	753,689	116,583	113,703	35,185	281,971	649,996	86.2	103,693	19,262	27,826	117,967
Delaware & Hudson	Aug.	846	2,107,377	146,088	2,363,928	258,428	420,969	39,639	799,266	1,608,594	68.0	755,334	600,278	561,136	385,260
	8 mos.	846	16,089,748	679,823	17,531,191	1,936,330	3,231,668	345,995	6,316,986	12,512,820	71.4	5,018,371	3,784,769	3,554,716	3,046,836
Delaware, Lackawanna & Western	Aug.	995	3,126,335	581,138	4,165,710	449,811	840,188	109,025	1,826,675	3,350,093	80.4	815,617	362,217	363,084	149,865
	8 mos.	995	26,257,266	4,262,946	34,052,210	2,590,121	6,631,292	895,028	15,367,933	26,656,663	78.3	7,395,547	3,843,847	3,531,470	2,665,976
Denver & Rio Grande Western	Aug.	2,554	2,260,081	177,261	2,563,737	316,780	530,779	88,346	874,210	1,906,970	74.4	656,767	453,841	318,401	143,494
	8 mos.	2,554	14,075,092	1,000,129	15,907,742	2,327,390	4,046,100	631,712	5,808,089	13,470,172	84.7	2,437,570	788,962	240,990	—361,114
Denver & Salt Lake	Aug.	232	210,435	5,888	225,217	27,852	42,973	2,403	63,699	141,159	62.7	84,058	58,361	104,787	80,336
	8 mos.	232	1,231,786	47,112	1,348,149	177,728	354,603	21,371	450,320	1,074,478	79.7	273,671	73,669	453,924	267,698
Detroit & Mackinac	Aug.	242	76,675	2,653	88,468	16,840	12,250	711	24,800	57,197	64.7	31,271	27,672	23,096	12,435
	8 mos.	242	438,156	17,413	513,507	96,784	94,127	7,163	190,239	409,721	79.7	103,786	75,597	47,601	28,841
Detroit & Toledo Shore Line	Aug.	50	277,935	.....	279,107	20,822	24,105	8,333	72,299	132,835	47.6	146,272	106,494	60,324	35,571
	8 mos.	50	2,431,753	.....	2,442,026	202,529	189,783	69,393	640,825	1,162,223	47.6	1,279,803	971,577	560,134	243,119
Detroit, Toledo & Ironton	Aug.	472	466,171	221	486,645	61,206	99,994	11,631	122,502	314,780	64.7	171,865	110,680	86,673	87,348
	8 mos.	472	4,735,112	1,739	4,875,444	519,527	709,532	96,932	1,137,165	2,625,783	53.9	2,249,661	1,647,855	1,480,527	1,135,163
Duluth, Missabe & Iron Range	Aug.	541	3,801,848	3,024	4,434,858	361,492	240,145	3,794	547,291	1,181,389	26.6	3,253,469	2,523,601	2,522,330	1,740,732
	8 mos.	541	14,153,910	14,071	16,501,648	1,501,024	1,817,315	33,988	2,737,076	6,353,338	38.5	10,148,310	6,982,850	6,984,655	3,468,091
Duluth, Winnipeg & Pacific	Aug.	175	120,586	924	125,170	28,597	19,118	2,173	52,681	106,148	84.8	19,022	9,837	—2,614	—9,869
	8 mos.	175	916,176	8,223	949,883	189,514	160,122	17,170	382,829	776,455	81.7	173,428	97,486	—21,033	—90,934
Elgin, Joliet & Eastern	Aug.	390	1,719,324	7	2,025,622	147,338	299,441	15,205	675,782	1,169,510	57.7	856,112	636,529	499,964	225,142
	8 mos.	390	11,439,396	78	13,496,238	1,090,180	2,343,542	119,700	5,029,653	8,869,135	65.7	4,627,103	3,446,656	2,724,585	1,232,300
Erie	Aug.	2,268	6,698,056	448,434	7,679,709	784,624	1,326,317	179,535	2,746,977	5,309,694	69.1	2,370,015	1,782,699	1,441,367	820,020
	8 mos.	2,268	47,857,931	3,079,084	54,693,042	4,969,680	10,489,471	1,430,522	21,047,756	40,075,514	73.3	14,617,528	10,029,004	7,649,979	5,588,412
Florida East Coast	Aug.	685	372,531	137,223	576,288	149,282	165,307	25,359	218,267	605,323	105.0	—29,035	—97,867	—125,684	—182,756
	8 mos.	685	4,247,998	2,464,225	7,506,476	977,349	1,297,878	230,440	2,609,583	5,662,378	75.4	1,844,098	1,263,258	788,834	702,829
Georgia Railroad	Aug.	329	314,714	21,294	357,736	35,379	59,660	17,859	153,522	277,350	77.5	80,386	65,227	73,455	67,388
	8 mos.	329	2,276,962	111,577	2,574,858	281,942	445,731	144,376	1,138,016	2,117,308	82.2	457,550	338,091	391,421	372,321
Georgia & Florida	Aug.	408	157,996	2,036	163,783	31,025	17,428	9,748	43,930	107,486	65.6	56,297	47,953	37,339	63,927
	8 mos.	408	743,193	11,528	783,088	184,417	133,073	69,692	300,869	730,610	93.3	52,478	—13,694	—48,997	—6,109
Grand Trunk Western	Aug.	1,029	1,713,296	112,024	1,969,490	280,250	363,031	42,483	753,293	1,512,956	76.8	344,415	241,991	—59,583	
	8 mos.	1,029	14,377,805	627,199	16,055,454	2,060,111	3,081,638	329,806	6,297,934	12,347,219	76.9	3,708,235	2,746,535	2,049,492	390,894
Canadian National Lines in New England	Aug.	172	91,470	4,792	105,265	52,906	18,578	1,445	54,811	132,569	125.9	—27,304	—43,399	—78,938	—58,864
	8 mos.	172	944,656	28,758	1,075,650	362,272	202,934	11,769	518,532	1,145,878	106.5	—70,228	—198,987	—516,738	—457,773
Great Northern	Aug.	8,069	10,505,218	457,056	11,880,012	1,567,098	1,623,907	193,488	2,961,273	6,615,401	55.7	5,264,611	3,723,742	3,559,431	3,011,743
	8 mos.	8,069	54,700,435	2,828,832	62,845,831	8,423,164	10,974,321	1,602,528	18,993,533	41,946,647	66.7	20,899,184	13,573,760	12,553,377	8,312,806
Green Bay & Western	Aug.	234	139,717	350	145,003	26,249	13,614	6,869	50,098	101,752	70.2	43,251	28,618	20,470	12,865
	8 mos.	234	1,063,349	2,455	1,107,954	208,078	129,374	56,445	379,293	813,055	73.4	294,899	180,826	139,220	131,957
Gulf & Ship Island	Aug.	259	68,112	7,085	82,617	24,095	18,123	2,240	46,957	94,639	114.6	—12,022	—28,894	—40,344	—34,164
	8 mos.	259	657,922	32,234	762,077	177,138	129,979	19,890	390,965	749,073	98.2	13,904	—115,251	—188,075	—173,947
Gulf, Mobile & Northern	Aug.	827	564,689	22,905	610,811	140,502	95,093	47,135	153,919	443,335	72.6	167,476	127,076	85,378	92,657
	8 mos.	827	4,160,627	139,501	4,488,900	690,005	696,188	333,554	1,229,022	3,207,776	71.5	1,281,124	890,724	585,447	669,436

REVENUES AND EXPENSES OF RAILWAYS

MONTH OF AUGUST AND EIGHT MONTHS OF CALENDAR YEAR 1940—CONTINUED

Name of road		Av. mileage operated during period	Operating revenues: Freight	Passenger	Total (inc. misc.)	Operating expenses: Maintenance of Way and structures	Maintenance of Equipment	Traffic	Transportation	Total	Operating ratio	Net from railway operation	Operating income	Net railway operating income 1940	Net railway operating income 1939
Illinois Central	Aug.	4,949	$6,508,674	$844,221	$7,966,752	$1,093,437	$1,837,234	$186,320	$2,927,049	$6,384,445	80.1	$1,582,307	$865,866	$893,787	$823,539
	8 mos.	4,949	52,029,625	5,981,216	63,030,036	7,132,927	14,603,559	1,603,993	24,233,638	50,275,660	79.8	12,754,376	7,079,941	6,649,014	7,082,004
Yazoo & Mississippi Valley	Aug.	1,608	1,121,808	89,161	1,277,866	124,574	209,702	28,946	483,081	894,125	70.0	383,741	247,695	166,334	42,361
	8 mos.	1,609	8,500,142	473,238	9,550,677	960,199	1,575,897	250,023	3,893,073	7,055,362	73.9	2,495,315	1,378,334	781,631	562,679
Illinois Central System	Aug.	6,557	7,630,482	933,382	9,244,618	1,218,011	2,046,936	215,266	3,410,130	7,278,570	78.7	1,966,048	1,111,426	1,069,033	873,813
	8 mos.	6,558	60,529,767	6,454,454	72,580,713	8,093,126	16,179,456	1,854,016	28,126,711	57,331,022	79.0	15,249,691	8,442,056	7,502,948	7,715,486
Illinois Terminal	Aug.	477	433,995	64,109	553,651	67,715	73,815	16,576	169,798	346,364	62.56	207,287	154,298	126,717	123,605
	8 mos.	478	3,159,270	484,074	4,003,770	449,810	577,265	137,265	1,355,687	2,665,396	66.57	1,338,374	948,497	760,567	644,889
Kansas City Southern	Aug.	879	1,054,762	50,248	1,205,604	114,612	178,115	56,962	343,255	749,360	62.2	456,244	341,244	275,924	238,019
	8 mos.	879	8,101,773	262,870	9,243,911	824,953	1,309,841	443,534	2,733,883	5,774,029	62.5	3,469,882	2,643,882	2,164,932	1,914,619
Kansas, Oklahoma & Gulf	Aug.	328	165,841	422	168,718	22,682	14,380	8,732	39,213	95,695	56.7	73,023	44,777	28,708	102,895
	8 mos.	328	1,427,022	3,107	1,452,114	127,978	101,144	69,454	320,878	687,808	47.4	764,306	596,970	463,225	638,739
Lake Superior & Ishpeming	Aug.	156	421,464	77	513,384	28,605	23,503	776	66,330	125,422	24.4	387,962	286,475	287,418	276,176
	8 mos.	156	1,822,071	446	2,205,824	217,298	207,602	5,267	338,949	822,332	37.3	1,383,492	922,157	927,647	432,602
Lehigh & Hudson River	Aug.	96	143,833	.....	144,846	23,700	23,303	3,546	40,630	97,613	67.4	47,233	30,717	19,953	8,541
	8 mos.	96	1,066,818	.....	1,073,492	119,776	176,448	28,520	344,033	719,784	67.1	353,708	228,370	143,888	108,917
Lehigh & New England	Aug.	190	372,758	.....	375,545	29,643	65,584	6,480	114,597	230,958	61.5	144,587	104,840	106,260	103,106
	8 mos.	190	2,866,179	.....	2,885,666	256,297	505,037	54,994	907,461	1,846,968	64.0	1,038,698	736,774	776,646	756,307
Lehigh Valley	Aug.	1,269	3,317,566	213,776	3,742,910	326,067	653,954	102,940	1,533,133	2,737,745	73.1	1,005,165	694,531	505,304	342,009
	8 mos.	1,278	27,543,005	1,336,186	30,707,795	2,088,859	5,378,175	857,159	13,025,887	22,337,914	72.7	8,369,881	5,883,366	4,122,940	3,590,551
Louisiana & Arkansas	Aug.	897	651,890	10,225	683,231	127,837	92,445	30,192	183,052	458,428	67.1	224,803	168,478	121,192	133,676
	8 mos.	853	5,039,746	60,978	5,301,741	891,991	738,498	235,149	1,438,422	3,513,285	66.3	1,788,456	1,346,109	984,395	828,568
Louisville & Nashville	Aug.	4,871	7,135,040	579,408	8,191,747	865,744	2,023,536	170,964	2,714,225	6,017,639	73.5	2,174,108	1,271,489	1,457,091	1,448,635
	8 mos.	4,871	55,749,535	4,244,578	63,875,474	6,862,757	15,566,701	1,447,034	21,777,294	47,820,815	74.9	16,054,659	9,833,057	10,613,348	8,564,936
Maine Central	Aug.	991	763,352	119,741	981,356	182,941	188,574	11,237	364,447	783,592	79.8	197,764	120,381	95,327	126,821
	8 mos.	991	6,843,585	632,320	8,209,356	1,248,712	1,425,201	87,429	2,922,928	5,957,663	72.6	2,251,693	1,580,092	1,304,019	1,199,154
Midland Valley	Aug.	352	114,451	2	116,354	13,368	9,836	2,586	30,885	62,228	53.5	54,126	42,623	30,415	50,575
	8 mos.	352	850,391	41	865,054	110,274	81,610	20,965	246,721	506,164	58.5	358,890	267,832	196,692	250,979
Minneapolis & St. Louis	Aug.	1,512	908,368	31,246	974,394	149,679	117,455	46,744	282,488	628,982	64.6	345,412	298,350	244,356	146,522
	8 mos.	1,512	5,630,844	73,301	5,972,991	944,153	1,021,562	396,012	2,140,178	4,765,563	79.8	1,207,428	846,163	540,642	347,641
Minneapolis, St. Paul & Sault Ste. Marie	Aug.	4,271	2,945,666	157,988	3,330,066	431,731	372,452	63,236	1,112,738	2,087,933	62.7	1,242,133	1,019,979	874,267	713,584
	8 mos.	4,281	17,382,155	681,508	19,507,654	2,945,362	3,164,854	513,790	7,738,445	15,085,213	77.3	4,422,441	2,979,558	2,162,406	468,657
Duluth, South Shore & Atlantic	Aug.	550	246,321	10,745	280,148	85,455	37,502	6,706	89,626	225,428	80.5	54,720	38,501	30,430	54,283
	8 mos.	550	1,498,443	61,143	1,705,510	354,005	272,684	53,007	648,066	1,379,839	80.9	325,671	210,477	182,463	—65,556
Spokane International	Aug.	152	78,083	698	85,690	13,882	8,041	2,444	22,647	50,916	59.4	34,774	29,362	24,560	28,618
	8 mos.	152	473,165	5,286	530,924	119,813	58,961	18,239	174,157	399,106	75.2	131,818	89,747	61,212	60,062
Mississippi Central	Aug.	150	59,010	1,739	63,408	32,675	10,498	7,628	20,622	75,936	119.8	—12,528	—17,375	—22,350	—3,262
	8 mos.	150	468,685	14,265	502,937	169,494	82,837	57,206	158,853	505,486	100.5	—2,549	—40,143	—76,654	—46,460
Missouri & Arkansas	Aug.	365	93,943	1,780	101,912	23,620	11,120	7,085	30,237	76,877	75.4	25,035	20,887	11,190	5,854
	8 mos.	365	689,472	11,265	755,451	182,958	83,806	55,824	242,883	603,572	79.9	151,879	117,438	48,777	26,257
Missouri-Illinois	Aug.	193	198,192	402	202,296	25,988	20,675	3,327	50,902	106,557	52.7	95,739	52,676	38,338	72,756
	8 mos.	193	1,394,469	2,624	1,418,282	174,134	173,617	24,518	382,411	798,348	56.3	619,934	441,360	345,423	377,882
Missouri-Kansas-Texas Lines	Aug.	3,293	1,931,291	181,748	2,324,255	304,629	440,232	104,397	881,323	1,850,615	79.6	473,640	258,024	66,730	—70,523
	8 mos.	3,293	15,056,929	1,291,439	18,085,174	2,276,750	3,042,558	841,161	7,082,118	14,221,243	78.6	3,863,931	2,386,284	925,193	565,909
Missouri Pacific	Aug.	7,152	6,044,226	503,084	7,195,842	1,255,737	1,371,546	236,529	2,554,236	5,673,860	78.8	1,521,982	1,009,713	666,356	321,550
	8 mos.	7,147	46,681,006	3,464,096	55,309,654	8,312,446	10,872,548	1,932,374	20,704,615	43,972,387	79.5	11,337,267	7,338,708	4,676,284	2,998,402
Gulf Coast Lines	Aug.	1,756	943,234	51,588	1,056,671	182,781	166,868	43,329	377,911	823,348	77.92	233,323	161,777	108,817	66,730
	8 mos.	1,759	9,220,089	296,362	10,023,899	1,594,899	1,464,194	358,612	3,119,566	6,957,234	69.41	3,066,665	2,439,245	1,716,630	1,986,436
International Great Northern	Aug.	1,155	731,187	78,462	929,389	159,547	163,746	28,784	379,325	784,170	84.4	145,219	83,424	31,125	1,724
	8 mos.	1,155	5,862,734	623,784	7,370,124	1,264,897	1,449,756	239,639	3,236,873	6,619,472	89.8	750,652	243,214	—253,701	—280,476
Mobile & Ohio	Aug.	See Gulf, Mobile & Ohio at end of page 536													
	8 mos.	See Gulf, Mobile & Ohio at end of page 536													
Monongahela	Aug.	172	461,295	997	464,250	37,199	31,620	536	90,924	162,754	35.1	301,496	245,241	160,745	130,947
	8 mos.	172	3,424,112	4,886	3,447,296	301,306	287,260	3,962	733,829	1,348,825	39.1	2,098,471	1,645,044	999,885	570,471

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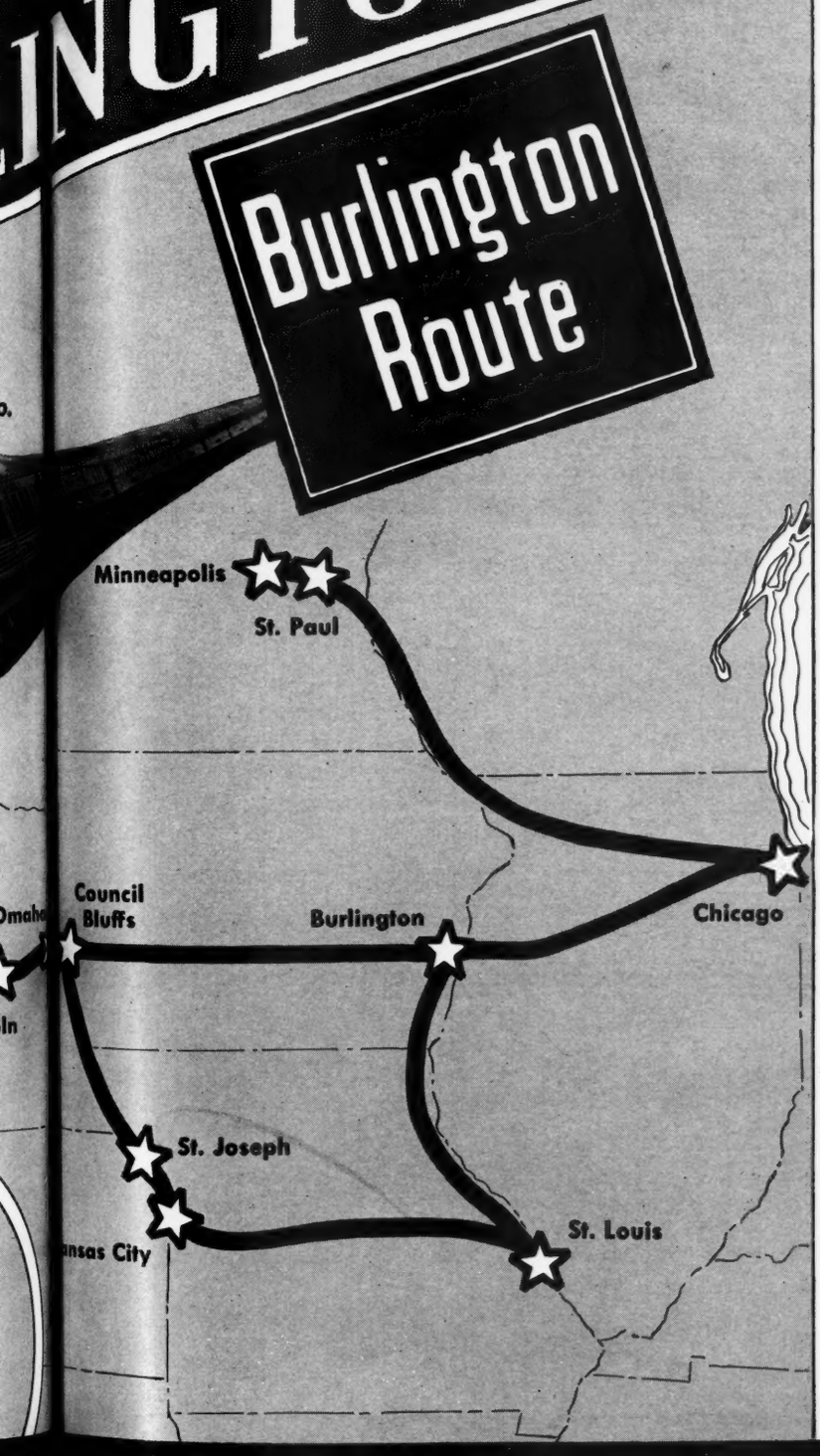
Pioneer Zephyr — 600 Hp.
BURLINGTON
9900
Burlington Route
Galaxy of Star
15 BURLIN
Latest Type Zephyr — 4000 Hp.
CB&Q
Burlington Route
Omaha
Lincoln
Denver
Dallas
Ft. Worth
Houston
To Fort Worth
ELECTRO-MOTIVE
SUBSIDIARY OF GENERAL MOTORS

GM
GENERAL MOTORS
DIESEL POWER

Performers
LINGTON ZEPHYRS



10,000,000 Miles Availability 97.6%

IN 1934 the Burlington "PIONEER ZEPHYR" made transportation history as America's first high speed Diesel-powered train and blazed the trail to improved passenger service. Larger power units and longer trains soon followed and today the Burlington Lines operate 15 Zephyrs — each a star performer with faster schedules — on-time arrivals — high availability — low operating cost and increased passenger travel.

These EMC Diesel-powered trains operate 11,084 miles daily, a total of over 4,000,000 miles annually. The mileage of all Zephyrs to September 1, 1940 totals over 10,000,000 with the high average availability of 97.6%.

Typically outstanding is the record of the "SAM HOUSTON ZEPHYR" No. 9901 which first entered service April 21, 1935 as a "TWIN CITY ZEPHYR" and operated 415,782 miles before being transferred to the Fort Worth-Houston service in September 1936. From September 30, 1936 to September 1, 1940, a period of 47 months, the 9901 operated 793,648 miles with 11 days out of service for annual inspections and 17 days for repairs on account of collision with a truck — an availability record of 98%.

E CORPORATION
LA GRANGE, ILLINOIS, U. S. A.

REVENUES AND EXPENSES OF RAILWAYS

Month of August and Eight Months of Calendar Year 1940—Continued

Name of road		Av. mileage operated during period	Operating revenues			Operating expenses					Operating ratio	Net from railway operation	Operating income	Net railway operating income	
			Freight	Passenger	Total (inc. misc.)	Maintenance of Way and structures	Maintenance of Equipment	Traffic	Transportation	Total				1940	1939
Montour	Aug.	51	$237,860	$.....	$239,603	$14,022	$50,970	$735	$47,508	$119,455	49.9	$120,148	$78,204	$105,554	$109,949
	8 mos.	51	1,475,466	17	1,489,268	104,265	365,300	6,944	352,723	880,699	59.1	608,569	384,441	604,632	491,827
Nashville, Chattanooga & St. Louis	Aug.	1,111	1,029,514	88,831	1,225,730	164,027	249,711	63,895	493,515	1,026,890	83.8	198,840	132,854	128,812	145,598
	8 mos.	1,111	8,089,666	760,601	9,871,066	1,102,850	1,949,855	534,538	3,950,186	7,985,176	80.9	1,885,890	1,253,542	1,064,593	1,175,680
Nevada Northern	Aug.	165	64,830	802	70,538	10,771	3,293	1,217	10,945	31,288	44.4	39,250	25,066	27,516	8,526
	8 mos.	165	442,120	6,248	484,721	63,630	21,142	9,911	81,249	215,676	44.5	269,045	163,507	182,701	124,858
New York Central	Aug.	10,984	22,711,970	5,340,237	31,687,985	3,548,065	6,404,608	528,278	11,567,486	23,283,352	73.5	8,404,633	5,239,412	4,029,717	3,513,448
	8 mos.	10,989	172,506,324	38,886,255	237,441,795	25,427,277	49,766,536	4,488,000	91,321,165	181,048,178	76.3	56,393,617	32,573,927	23,077,005	15,015,638
Pittsburgh & Lake Erie	Aug.	233	2,249,497	41,659	2,341,620	173,926	706,426	26,866	585,987	1,570,962	67.1	770,658	473,213	737,167	341,875
	8 mos.	233	14,381,296	320,787	15,134,417	1,236,012	5,304,794	222,667	4,454,786	11,843,658	78.3	3,290,759	1,482,081	3,399,993	1,288,597
New York, Chicago & St. Louis	Aug.	1,704	3,825,126	96,617	4,038,494	428,378	623,467	116,716	1,291,098	2,583,117	64.0	1,455,377	1,171,873	863,609	648,352
	8 mos.	1,704	28,128,011	516,113	29,527,047	3,069,941	4,913,332	970,476	10,675,139	20,600,524	69.8	8,926,523	7,007,795	4,590,740	3,954,259
New York, New Haven & Hartford	Aug.	1,867	4,088,635	2,476,320	7,314,919	1,144,835	1,129,280	105,076	2,682,410	5,450,048	74.5	1,864,871	1,326,902	719,712	311,814
	8 mos.	1,866	31,741,542	17,027,019	54,345,530	7,199,704	9,085,456	929,383	21,104,341	41,369,853	76.1	12,975,677	8,590,118	3,706,204	3,393,352
New York Connecting	Aug.	21	213,141	.....	224,091	45,060	8,683	.....	28,615	83,682	37.3	140,409	96,361	120,890	68,745
	8 mos.	21	1,558,398	.....	1,639,942	262,280	49,763	.....	190,567	513,435	31.3	1,126,507	778,384	849,394	797,865
New York, Ontario & Western	Aug.	576	401,976	86,637	536,801	64,917	118,632	14,939	258,184	416,395	88.7	60,406	10,468	—26,561	—61,129
	8 mos.	576	3,079,417	233,420	3,674,955	441,927	869,933	131,179	1,941,183	3,540,400	96.3	134,555	—249,342	—505,119	—258,445
New York, Susquehanna & Western	Aug.	144	204,815	19,887	235,075	25,085	25,951	2,190	109,324	172,529	73.4	62,546	34,910	—1,752	—32,242
	8 mos.	145	1,845,079	151,700	2,086,738	163,223	207,159	18,243	852,062	1,330,289	63.7	756,449	520,394	293,331	104,407
Norfolk & Western	Aug.	2,191	9,245,368	207,022	9,680,497	1,117,787	1,807,666	143,393	1,850,821	5,149,481	53.2	4,531,016	2,458,170	2,790,984	3,406,980
	8 mos.	2,191	66,039,501	1,318,115	69,146,292	7,165,176	13,643,375	1,164,493	14,503,911	38,033,931	55.0	31,112,361	19,701,433	22,046,053	15,502,262
Norfolk Southern	Aug.	805	327,913	5,201	365,206	67,970	51,670	25,521	135,300	303,637	83.1	61,569	28,475	14,630	24,487
	8 mos.	805	2,768,223	29,281	2,927,325	567,575	424,157	199,201	1,107,972	2,472,260	84.5	455,065	190,987	49,612	184,213
Northern Pacific	Aug.	6,720	6,015,442	480,148	7,017,590	997,527	1,247,124	165,118	2,184,128	4,896,026	69.8	2,121,564	1,479,063	1,705,964	1,350,559
	8 mos.	6,720	37,107,123	2,623,031	43,302,938	6,043,183	9,019,203	1,362,651	15,383,373	33,993,655	78.5	9,309,283	4,652,944	6,852,504	3,526,690
Northwestern Pacific	Aug.	352	286,724	51,769	367,641	49,126	47,157	2,663	167,848	277,072	75.4	90,569	69,796	55,339	37,647
	8 mos.	352	1,566,146	357,970	2,125,249	526,028	390,558	25,558	1,143,189	2,168,151	102.0	—42,902	—203,615	—297,462	—236,014
Oklahoma City-Ada-Atoka	Aug.	132	19,365	338	21,353	4,033	625	708	10,193	16,986	79.5	4,367	2,240	—1,912	—4,229
	8 mos.	132	171,474	2,194	187,638	35,103	11,124	5,958	84,200	149,156	79.5	38,482	19,888	—13,034	23,450
Pennsylvania	Aug.	10,253	32,579,936	6,367,477	42,761,707	4,894,462	8,633,976	751,684	14,095,729	29,597,239	69.2	13,164,468	8,543,459	7,538,884	6,785,041
	8 mos.	10,266	231,252,860	46,335,558	304,502,475	30,651,535	62,110,981	5,926,571	108,704,671	217,401,296	71.4	87,101,179	55,135,203	48,059,619	39,113,083
Long Island	Aug.	379	606,757	1,758,643	2,492,915	195,181	323,339	13,944	1,002,261	1,569,395	63.0	923,520	463,925	287,012	203,493
	8 mos.	379	4,741,115	10,925,724	16,548,873	1,666,176	2,797,562	101,656	7,615,435	12,489,535	75.5	4,059,338	1,487,258	482,261	232,515
Pennsylvania-Reading Seashore Lines	Aug.	411	305,050	471,682	810,799	82,214	109,300	7,689	384,430	599,633	74.0	211,166	76,668	—66,066	14,204
	8 mos.	411	2,224,386	1,651,612	4,056,315	672,781	711,753	61,180	2,417,603	3,993,423	98.4	62,892	—650,976	—1,391,541	—1,329,104
Pere Marquette	Aug.	2,114	2,500,012	127,267	2,846,724	398,708	536,454	62,476	981,613	2,082,948	73.2	763,776	566,066	402,019	158,742
	8 mos.	2,114	19,365,660	661,057	21,220,524	2,853,314	4,390,465	520,789	7,947,990	16,499,009	77.8	4,721,515	3,229,542	2,201,230	1,009,317
Pittsburg & Shawmut	Aug.	98	141,694	.....	141,994	27,188	20,791	1,902	87,107	87,107	61.3	54,887	49,469	41,961	5,809
	8 mos.	98	868,295	.....	870,673	121,295	160,907	15,077	209,196	551,449	63.3	319,224	288,856	221,417	—23,937
Pittsburgh & West Virginia	Aug.	136	376,116	16	392,293	88,636	78,234	17,895	286,690	105,603	78,858	91,543	92,583		
	8 mos.	136	2,643,222	394	2,765,855	501,418	596,366	138,757	2,037,243	728,612	529,124	584,556	424,581		
Pittsburg, Shawmut & Northern	Aug.	190	92,922	.....	93,593	16,645	16,270	947	68,730	24,863	19,680	13,326	8,685		
	8 mos.	190	780,400	28	785,966	116,648	135,042	8,452	556,883	229,083	187,219	119,339	29,962		
Reading	Aug.	1,449	4,925,075	254,643	5,413,255	501,468	1,160,409	70,697	1,925,058	3,794,789	70.1	1,618,466	1,113,036	1,107,633	897,195
	8 mos.	1,450	36,676,705	2,041,128	40,593,716	3,255,517	8,066,420	564,608	15,442,612	28,493,741	70.2	12,099,975	8,511,319	8,133,057	6,719,269
Richmond, Fredericksburg & Potomac	Aug.	118	408,613	211,263	710,646	100,899	136,983	9,088	250,655	534,365	75.2	176,281	110,739	86,901	60,391
	8 mos.	118	3,374,925	2,125,420	6,402,903	760,596	1,123,244	77,783	2,409,043	4,762,670	74.4	1,640,233	1,134,119	604,456	604,916
Rutland	Aug.	407	224,827	33,061	317,155	30,896	65,019	7,886	179,613	293,662	92.6	23,493	—4,116	—8,115	27,457
	8 mos.	407	1,631,737	204,653	2,331,608	283,871	492,039	84,463	1,255,651	2,206,257	94.6	125,351	—59,455	—74,074	—67,767
St. Louis-San Francisco	Aug.	4,812	3,190,903	266,545	3,771,800	545,649	885,722	114,687	1,403,154	3,120,850	82.7	650,950	329,512	387,064	289,862
	8 mos.	4,816	24,685,341	2,049,727	29,303,927	4,197,711	6,859,459	949,610	11,506,285	24,938,992	85.1	4,364,935	1,793,015	1,921,163	1,102,902
St. Louis, San Francisco & Texas	Aug.	159	100,794	3,156	109,302	20,988	11,990	8,542	52,637	99,221	90.8	10,081	2,050	—19,270	—14,312
	8 mos.	183	865,163	6,032	909,094	178,357	107,038	63,010	408,611	799,833	88.0	109,261	44,011	—151,344	—30,648

REVENUES AND EXPENSES OF RAILWAYS

MONTH OF AUGUST AND EIGHT MONTHS OF CALENDAR YEAR 1940—CONTINUED

Name of road		Av. mileage operated during period	Operating revenues			Operating expenses					Operating ratio	Net from railway operation	Operating income	Net railway operating income	
						Maintenance of									
			Freight	Passenger	Total (inc. misc.)	Way and structures	Equipment	Traffic	Transportation	Total				1940	1939
St. Louis Southwestern Lines	Aug.	1,649	$1,522,059	$47,010	$1,643,944	$327,830	$278,786	$79,701	$491,484	$1,257,419	76.5	$386,525	$274,797	$176,322	—$48,457
	8 mos.	1,664	12,322,979	217,328	13,068,796	2,110,047	2,011,426	665,527	4,075,480	9,508,837	72.8	3,559,959	2,671,020	1,586,224	218,009
Seaboard Air Line	Aug.	4,314	2,611,334	440,671	3,361,926	605,752	815,843	163,053	1,353,433	3,128,722	93.1	233,204	3,204	—31,846	—66,899
	8 mos.	4,314	23,425,637	5,312,733	31,510,954	4,689,890	6,302,232	1,410,362	11,950,355	26,119,675	82.9	5,391,279	3,011,279	2,130,853	1,596,631
Southern Railway	Aug.	6,594	7,515,094	885,396	9,022,384	1,401,245	1,533,464	160,968	3,032,600	6,460,794	71.6	2,561,590	1,847,509	1,590,107	1,772,449
	8 mos.	6,598	56,153,369	5,887,874	67,173,018	9,081,514	11,689,689	1,312,290	23,347,373	48,082,948	71.6	19,090,070	13,545,760	11,507,009	10,909,921
Alabama Great Southern	Aug.	315	646,870	94,287	785,174	90,800	147,016	14,884	196,704	472,740	60.2	312,434	222,150	223,040	145,003
	8 mos.	315	4,493,107	413,990	5,239,417	706,602	1,087,228	106,554	1,506,608	3,594,591	68.6	1,644,826	1,031,632	1,047,649	1,030,177
Cincinnati, New Orleans & Texas Pacific	Aug.	337	1,369,610	97,453	1,545,085	172,487	293,509	30,522	378,449	926,573	60.0	618,512	427,515	449,468	319,911
	8 mos.	337	10,552,726	820,333	12,036,007	1,398,442	2,297,277	239,781	3,105,227	7,480,765	62,2	4,555,242	3,151,491	3,248,198	3,089,311
Georgia Southern & Florida	Aug.	398	153,834	25,904	195,568	33,561	41,884	1,838	77,492	161,221	82.4	34,347	18,631	8,320	—20,788
	8 mos.	398	1,177,383	346,562	1,676,444	291,821	300,788	14,809	696,733	1,372,562	81.9	303,882	175,549	86,925	31,207
New Orleans & Northeastern	Aug.	204	227,032	40,794	284,678	40,074	37,211	5,691	82,797	177,896	62.5	106,782	76,327	50,709	48,815
	8 mos.	204	1,774,543	147,849	2,062,137	295,232	285,620	45,697	627,318	1,353,700	65.7	708,437	461,374	275,408	252,232
Southern Pacific	Aug.	8,623	12,305,556	2,459,709	16,057,004	1,456,712	2,622,289	398,720	5,720,085	11,115,374	69.2	4,941,630	3,680,408	2,810,028	2,319,900
	8 mos.	8,636	88,140,807	13,660,063	110,840,528	11,705,234	20,057,756	3,030,243	41,416,047	82,879,609	74.8	27,960,919	18,282,698	11,973,945	11,725,725
Southern Pacific Steamship Lines	Aug.	....	680,947	45,195	752,792	23,068	88,159	18,660	520,937	662,711	88.0	90,081	66,223	65,424	—9,855
	8 mos.	....	5,524,313	266,940	6,083,600	141,773	843,986	147,932	4,343,223	5,588,088	91.9	495,512	301,369	293,242	171,587
Texas & New Orleans	Aug.	4,417	3,058,324	386,023	3,742,699	598,616	582,344	124,227	1,286,243	2,796,122	74.7	946,577	656,938	446,001	284,909
	8 mos.	4,417	24,319,532	2,369,914	29,013,662	4,609,294	5,075,072	999,970	10,065,735	22,389,253	77.2	6,624,409	4,154,784	2,203,383	2,147,099
Spokane, Portland & Seattle	Aug.	948	810,429	50,131	921,679	198,199	95,392	10,413	287,454	621,680	67.5	299,999	224,522	153,167	143,072
	8 mos.	948	5,236,215	266,087	5,973,405	1,413,553	693,988	86,059	2,100,197	4,525,074	75.8	1,448,331	848,036	427,810	421,219
Tennessee Central	Aug.	286	193,534	4,310	210,792	44,691	33,819	6,915	73,153	168,151	79.8	42,641	34,047	19,546	15,667
	8 mos.	286	1,578,295	39,761	1,722,589	318,897	270,829	55,752	591,019	1,316,024	76.4	406,565	302,998	185,926	88,277
Texas & Pacific	Aug.	1,887	1,658,762	253,918	2,106,068	279,634	376,126	72,368	688,317	1,530,003	72.6	576,065	422,265	357,509	344,798
	8 mos.	1,912	14,061,172	1,528,586	17,101,448	2,039,450	3,142,658	599,234	5,539,648	12,241,116	71.6	4,860,332	3,633,318	2,849,214	2,403,979
Texas Mexican	Aug.	162	72,596	250	84,785	13,073	8,073	3,179	36,503	66,852	78.8	17,933	11,899	9,154	—10,225
	8 mos.	162	465,270	2,707	573,441	91,251	75,472	24,847	247,471	485,780	84.7	87,661	40,625	15,406	49,097
Toledo, Peoria & Western	Aug.	239	190,030	.....	193,400	33,271	15,159	17,397	42,310	119,913	62.0	73,487	54,138	38,990	38,747
	8 mos.	239	1,506,146	54	1,529,737	329,759	118,657	139,961	352,976	1,043,025	68.2	486,712	333,763	211,874	185,871
Union Pacific System	Aug.	9,898	12,752,831	1,933,792	15,956,474	1,938,001	3,205,794	357,550	4,957,745	11,285,132	70.7	4,671,342	3,407,472	2,470,642	2,456,048
	8 mos.	9,892	83,119,728	11,554,954	103,654,260	11,062,658	21,236,858	3,396,928	35,919,873	77,530,463	74.8	26,123,797	15,781,785	10,309,491	8,164,291
Utah	Aug.	111	74,904	.....	75,068	10,823	27,202	397	22,151	64,740	86.2	10,328	1,071	1,371	—6,033
	8 mos.	111	495,268	.....	496,212	68,502	186,322	3,368	140,789	433,379	87.3	62,833	—4,022	19,180	—8,139
Virginian	Aug.	639	2,140,827	3,426	2,194,690	245,287	384,113	21,561	322,509	1,002,705	45.7	1,191,985	591,985	669,976	908,302
	8 mos.	639	16,269,312	23,296	16,684,407	1,440,339	3,122,914	197,861	2,411,101	7,418,283	44.5	9,266,124	6,416,124	6,846,539	5,091,301
Wabash	Aug.	2,409	3,375,367	226,328	3,864,811	584,228	653,613	149,356	1,442,785	2,984,180	77.2	880,631	640,117	292,777	89,537
	8 mos.	2,409	25,804,517	1,591,607	29,548,269	4,076,632	4,988,678	1,190,256	11,864,232	23,384,826	79.1	6,163,443	4,300,070	1,567,288	893,012
Ann Arbor	Aug.	294	344,654	3,684	370,770	35,507	68,959	13,062	145,627	275,846	74.4	94,924	70,330	54,455	47,164
	8 mos.	294	2,593,530	17,889	2,706,274	268,473	569,038	109,587	1,172,419	2,217,250	81.9	489,024	302,580	194,522	123,485
Western Maryland	Aug.	859	1,719,533	10,630	1,781,286	221,754	336,536	38,050	410,006	1,058,116	59.4	723,170	558,170	565,050	372,499
	8 mos.	859	11,899,689	55,816	12,387,618	1,541,360	2,617,719	313,365	3,187,808	8,058,292	65.1	4,329,326	3,384,326	3,416,623	2,384,602
Western Pacific	Aug.	1,208	1,498,192	82,531	1,612,817	271,559	240,694	64,451	570,744	1,206,490	74.8	406,327	316,008	235,746	210,703
	8 mos.	1,208	10,212,721	403,388	10,847,443	1,946,462	1,738,346	502,841	4,182,453	8,823,983	81.3	2,023,460	1,328,756	679,145	101,833
Wheeling & Lake Erie	Aug.	507	1,445,878	1	1,550,217	212,774	318,455	34,611	449,595	1,046,352	67.5	503,865	268,396	378,134	426,554
	8 mos.	508	10,518,229	21	11,060,257	1,283,840	2,150,084	290,260	3,250,478	7,234,473	65.4	3,825,784	2,303,847	2,990,390	2,015,119
*Gulf, Mobile & Ohio	Aug.	1,146	937,703	40,222	1,024,713	152,290	168,839	42,279	325,078	777,649	75.9	247,064	183,271	107,063	75,109
	8 mos.	1,146	7,000,944	202,087	7,572,464	1,338,692	1,447,079	349,391	2,788,314	6,340,109	83.7	1,232,355	727,602	113,469	418,583

* Gulf, Mobile & Ohio is a new Company for month of August which includes Mobile and Ohio. The eight months figures include Mobile & Ohio through July plus new Company figures for month of August.

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